

Attachment G1

**Apartment Design Guide Report
Tower & Plaza Buildings**

ADG Compliance Table - D1(a) – Tower Building and Plaza Building

2E Building Depth	Compliance	Comment
12-18m (glass to glass)	Acceptable	Plaza Building: 17m. The Tower Building does not contain any cross-over apartments.

2F Building Separation	Compliance	Comment
<p>Up to four storeys (approximately 12 metres):</p> <ul style="list-style-type: none"> • 12m between habitable rooms / balconies • 9m between habitable and non-habitable rooms • 6m between non-habitable rooms 	<p>No</p> <p>Yes</p>	<p>A lane between the Plaza and Tower Buildings separates the buildings by 4m. This is acceptable noting visual privacy has been addressed by drawing amendments. See discussion below – Design Competition response section.</p> <p>The Tower and Young Street North Building are separated by 14m up to a height of 4 storeys.</p>
<p>Five to eight storeys (approximately 25 metres):</p> <ul style="list-style-type: none"> • 18m between habitable rooms / balconies • 12m between habitable and non-habitable rooms • 9m between non-habitable rooms 	No	<p>As above, the Plaza and Tower Buildings are separated by 4m, however visual privacy has been addressed by the design.</p> <p>The Tower Building and the Young Street North Building are separated by 14m. Notwithstanding this, drawings have been amended to address visual privacy between apartments.</p> <p>East-facing windows within the Young Street North Building are proposed to be constructed as casement windows using reeded (textured) glass. See discussion below – Design Competition response section.</p>
<p>Nine storeys and above (over 25m):</p> <ul style="list-style-type: none"> • 24m between habitable rooms / balconies • 18m between habitable and non-habitable rooms • 12m between non-habitable rooms 	N/A	<p>There are no other buildings surrounding the Tower Building that are greater than 7 storeys in height.</p>

3D Communal and Public Open Space	Compliance	Comment
Communal open space has a minimum area equal to 25% of the site.	Yes	<p>Communal open space is defined by the ADG as outdoor space located within the site at ground level or on a structure that is within common ownership and for the recreational use of residents of the development. Communal open space may be accessible to residents only, or to the public.</p> <p>Precinct D1(a) contains the Tower, Plaza and Young Street North Buildings. Extensive areas of communal open space are provided at the ground level, comprising an open plaza containing the Dahl'Wah Circle and the 'Sensory Walk', which is located between the Tower and Young Street North Building. Additional private communal open space is provided at the roof top levels.</p> <p>The applicant states that a combined total of 2,708sqm (68% of the precinct) is provided as communal open space, including 919sqm provided as private, roof level communal open space.</p> <p>However, the applicant has included the rear yards of Young Street North and a laneway separating the Plaza and Tower Buildings. When these areas are excluded (300sqm), precinct D1(a) provides 2,408sqm of the precinct area as communal open space (60%).</p>
Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of two (2) hours between 9am and 3pm on 21 June (midwinter).	Yes	Communal open spaces at the ground level will receive solar access to greater than 50% of the areas provided. Roof level private communal open spaces will receive solar access for the entire day, requiring the provision of shade structures.

3E Deep Soil Zones	Compliance	Comment
Deep soil zones are to have a minimum area equivalent to 7% of the site and have a minimum dimension of 6m	Acceptable	The applicant has provided a deep soil diagram showing 1,744sqm of the overall site will be provided as deep soil zones (11%), and that 782sqm of the

3E Deep Soil Zones	Compliance	Comment
		<p>D1(a) area will be provided as deep soil (18%).</p> <p>Notwithstanding this, Council's officers are of the view the figures provided by the applicant include areas that should technically be excluded, including paved areas south of the Young Street substation, areas of deep soil that have dimensions of less than 3m facing Young Street and deep soil areas that are above an existing stormwater culvert that is 5m below ground level.</p> <p>When these areas are excluded, deep soil zones for the D1(a) area equate to approximately 472sqm or 10% of the precinct area.</p> <p>When deep soil zones above the 5m deep culvert are excluded, deep soil zones for the D1(a) area equate to approximately 214sqm, or 5% of the precinct area. See discussion section of the planning report.</p>

3F Visual Privacy	Compliance	Comment
<p>Up to four storeys (12 metres):</p> <ul style="list-style-type: none"> • 6m between habitable rooms / balconies • 3m between non-habitable rooms 	<p>No</p> <p>Yes</p>	<p>As above, the Plaza and Tower Buildings are separated by 4m, however visual privacy has been addressed by the design, including highlight windows and suitably placed louvred privacy screens. See discussion in the Planning report.</p> <p>The Tower and Young Street North Building are separated by 14m.</p>
<p>Five to eight storeys (25 metres):</p> <ul style="list-style-type: none"> • 9m between habitable rooms / balconies • 4.5m between non-habitable rooms 	<p>No</p>	<p>As above, privacy impacts between the Plaza and Tower Buildings have been addressed by the use of highlight windows and suitably placed louvred privacy screens.</p> <p>The Tower and Young Street North Building are separated by 14m.</p> <p>Notwithstanding this, drawings have been amended to address visual privacy between apartments. East-facing windows within the Young Street North</p>

3F Visual Privacy	Compliance	Comment
		Building are proposed to be constructed as casement windows using reeded (textured) glass. West-facing balconies are provided with operable, sliding privacy screens.
Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas.	Yes	<p>Young Street north apartments are provided with entry lobbies that provide space for storage and that separate living areas from gallery access and circulation areas.</p> <p>Apartments within the Tower and Plaza Buildings are suitably designed to locate bedrooms away from circulation areas, noting a small number of apartments are serviced by each lift core and corridors.</p>

4A Solar and Daylight Access	Compliance	Comment
70% of units to receive a minimum of 2 hours of direct sunlight in midwinter to living rooms and private open spaces.	Yes	<p>The applicant states that the overall development site achieves 74% compliance.</p> <p>Council's officers have reviewed the documents provided and are of the view that the true figure is 70% (262 of 372 apartments).</p> <p>The applicant states that the Tower Building achieves 79% solar compliance and that the Plaza Building achieves 42% compliance (70% at a precinct level).</p> <p>Council's assessment is that the Tower Building achieves 75% and the Plaza Building 35% compliance (69% at a precinct level).</p> <p>Despite the non-compliance, the proposal is supported when assessed against the design criteria and objectives of the ADG.</p> <p>See the discussion section of the planning report for detailed assessment.</p>
Maximum of 15% of apartments in a building receive no direct sunlight	No	There are no dwellings within the Tower Building that receive no direct sunlight at midwinter, whereas 11 of 26 apartments

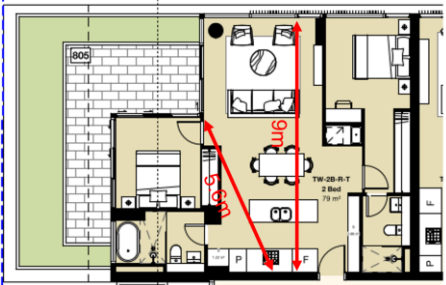
4A Solar and Daylight Access	Compliance	Comment
between 9am and 3pm at midwinter.		<p>within the Plaza Building receive no direct sunlight (42%).</p> <p>The non-compliance can be supported for the reasons outlined in the discussion section regarding solar access generally, which are that:</p> <ul style="list-style-type: none"> • the Plaza Building and the Tower Building are anticipated by SDCP2012 controls to be one building with a 4 storey bridge linking the buildings, with a combined total of 11 of 173 apartments receiving no sunlight at the winter solstice (6%); • the inclusion of a laneway break between the 2 buildings was commended by the design excellence was commended for respecting the requirements of the masterplan envelope and urban strategy prescribed for the Danks Street Precinct, whilst also providing improved site legibility and connectivity with an additional through-site-link, and providing a new site vista to the heritage listed substation facing Young Street; and • the scale of the Plaza Building is satisfactory to reduce bulk in the vicinity of the Valve House building.

4B Natural Ventilation	Compliance	Comment
All habitable rooms are naturally ventilated.	Yes	All habitable rooms across the Tower and Plaza Buildings are naturally ventilated.
Minimum 60% of apartments in the first nine (9) storeys of the building are naturally cross ventilated.	No	<p>Apartments are shown as being naturally cross ventilated within the first 9 storeys as follows:</p> <ul style="list-style-type: none"> • Tower Building: 34/75 (46%) • Plaza Building: 21/23 (91%)

4B Natural Ventilation	Compliance	Comment
		<p>When combined, 55 of 97 apartments (within the first 9 storeys) are naturally cross ventilated (57%).</p> <p>The shortfall is 4 apartments, which can be justified given the Tower and Plaza Buildings were anticipated by the SDCP2012 controls to be one building with a 4 storey bridge linking the buildings. Further, the non-compliance (57%) is an improvement on the compliance achieved by the winning scheme during design excellence competition process (55%).</p>
Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.	Yes	A cross over apartment located within the Plaza Building has a depth of approximately 12m.


4C Ceiling Heights	Compliance	Comment
Habitable rooms: 2.7m	Yes	<p>Floor to floor heights are provided allow for minimum ceiling heights of 2.7m:</p> <ul style="list-style-type: none"> • Plaza Building: 3.15m-4.7m • Tower Building: 3.15-3.4m
If located in mixed use areas – 3.3m for ground and first floor to promote future flexibility of use.	Yes	<p>Floor to floor heights allow for ceiling heights exceeding 3.3m:</p> <ul style="list-style-type: none"> • Plaza Building: 3.8m • Tower Building: 4.6m

4D Apartment Size and Layout	Compliance	Comment
<p>Minimum unit sizes:</p> <ul style="list-style-type: none"> • Studio: 35m² • 1 bed: 50m² • 2 bed: 70m² • 3 bed: 90m² 	Yes	<p>studio: 42sqm</p> <p>1 bedroom: 50-62sqm</p> <p>2 bedroom: 75-88sqm</p> <p>3 bedroom: 112sqm</p>

4D Apartment Size and Layout	Compliance	Comment
The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m ² each.		
Every habitable room is to have a window in an external wall with a minimum glass area of 10% of the floor area of the room.	Yes	Habitable rooms are provided with external windows with minimum glass areas of 10% of the floor area of the room.
Habitable room depths are to be no more than 2.5 x the ceiling height.	No	<p>Several habitable rooms within the Tower Building have depths that exceed 2.5 x the ceiling heights (9m compared to 6.8m).</p> <p>However, these rooms are provided with large, sliding glass doors to side balconies. The depth of the rooms is decreased to 5.8m, as measured from the side sliding glass windows to the rear walls of kitchens.</p> 
8m maximum depth for open plan layouts.	Acceptable	As above, rooms with depths exceeding 8m are provided with side sliding doors to balconies that provide light and ventilation to the kitchen areas.
<p>Minimum area for bedrooms (excluding wardrobes):</p> <ul style="list-style-type: none"> • master bedroom: 10m² • all other bedrooms: 9m² <p>Minimum dimension of any bedroom is 3m (excluding wardrobes).</p>	Yes	Master bedrooms exceed 10sqm (11sqm). All other bedrooms have areas exceeding 9sqm. Bedrooms have minimum dimensions that exceed 3m.
Living and living/dining rooms minimum widths:	Yes	Living/dining rooms have minimum widths of 4-6m.

4D Apartment Size and Layout	Compliance	Comment
<ul style="list-style-type: none"> • Studio and one-bedroom: 3.6m • Two-bedroom or more: 4m 		
4m minimum width for cross over and cross through apartments.	Yes	A cross over apartment within the Plaza Building has a minimum widths of 10.4m.

4E Private Open Space and Balconies	Compliance	Comment
<p>Studio apartments are to have a minimum balcony area of 4m² with a minimum depth of 1m.</p> <p>One bed apartments are to have a minimum balcony area of 8m² with a minimum depth of 2m.</p> <p>Two bed apartments are to have a minimum balcony area of 10m² with a minimum depth of 2m.</p> <p>Three bed apartments are to have a minimum balcony area of 12m² with a minimum depth of 2.4m.</p>	Yes	<p>studio: 9sqm, depth 1m</p> <p>1 bedroom apartments: 8sqm, 2m</p> <p>2 bedroom apartments: 10sqm, 2m</p> <p>3 bedroom apartments: 15sqm, 2.9m</p>
Private open space for apartments on ground level, on a podium, or similar, must have a minimum area of 15m ² and a minimum depth of 3m.	No	<p>A 1 bedroom apartment within the Tower Building (TW-1B-B) is provided with 8sqm at the ground level. However the provision of a balcony with dimensions of 2.6 x 3m has high amenity for residents as it can accommodate a small table and chairs.</p> <p>The balcony is screened by landscape plantings and raised above an adjoining communal open space, providing good visual and acoustic privacy.</p>

4E Private Open Space and Balconies	Compliance	Comment
		

4F Common Circulation and Spaces	Compliance	Comment
<p>The maximum number of apartments off a circulation core on a single level is eight (8).</p>	No	<p>A maximum of 11 apartments within the Tower Building are serviced by a circulation core of 2 lifts.</p> <p>The non-compliance is limited to Levels 2 and 3 of the Tower Building, with all other levels having a maximum of 8 apartments. Amenity within corridors is increased by wide circulation foyers in front of lift (2.2m) and provision of dedicated waste chute rooms off foyers.</p>
<p>For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40.</p>	No	<p>Two lifts within the Tower Building would allow for a maximum of 80 apartments, where there are 147 apartments.</p> <p>A lift traffic analysis report has been provided for the Tower Building. The report concludes that 2 lifts at a rated speed of 2.5m/s provide a reasonable ('3.5 star') quality of service with a resultant Average Waiting Time of between 40 and 49 seconds for expected handling capacities.</p> <p>The report concludes that there are limitations to operating a 2-lift solution, with respect to the movement of goods and furniture in an out of the building.</p> <p>The report recommends that goods movements be restricted to off-peak</p>

4F Common Circulation and Spaces	Compliance	Comment
		<p>lifting periods. The Loading Dock Management Plan</p> <p>A 2 or 3 hour allocation has been made for house removals – with these windows to be restricted to weekends outside of busy delivery periods. Initially a window has been identified between 9am-12pm on weekends however this will be confirmed closer to the time of operation. Two additional delivery windows on weekday afternoons between 4pm-6pm have also been identified. This will be available in both the D1 and D2 loading docks where delivery vehicles up to an MRV (8.8m) can be used. Bookings for this purpose will need to be made in advance with building management</p> <p>All deliveries to the site, including resident deliveries and retail goods deliveries, will be subject to a strict 20 minute delivery window.</p>
<p>Primary living room or bedroom windows should not open directly onto common circulation spaces, whether open or enclosed. Visual and acoustic privacy from common circulation spaces to any other rooms should be carefully controlled.</p>	<p>Yes</p>	<p>There are no primary living room or bedroom windows that open directly onto common circulation spaces. a</p>
<p>Daylight and natural ventilation are provided to all common circulation spaces.</p>	<p>Yes</p>	<p>Corridors are provided with daylight and able to be naturally ventilated via windows at their terminus.</p>

4G Storage	Compliance	Comment
<p>Minimum storage provision facilities:</p> <ul style="list-style-type: none"> • Studio: 4m³ • 1 bed: 6m³ 	<p>Yes</p>	<p>Apartments are provided with the minimum quantum of storage, both within dwellings and also within basement storage lockers.</p>

4G Storage	Compliance	Comment
<ul style="list-style-type: none"> • 2 bed: 8m3 • 3 bed: 10m3 (Minimum 50% storage area located within unit)		

4J Noise and Pollution	Compliance	Comment
Have noise and pollution been adequately considered and addressed through careful siting and layout of buildings?	Yes	There are no apartments within the Plaza and Tower Buildings that are affected by traffic noise. Works are proposed to the Pump House to mitigate noise emanating from existing plant.