4.4 Accessibility

Self care, Mobility and Communication
According to the Australian Bureau of Statistics, in 1998, 3.6 million people in Australia had a disability (19% of the total population). Of those with a disability, 87% (3.2 million) experienced specific restrictions in core activities, schooling or employment.

Self care, mobility and communication are fundamentally important activities underlying all aspects of everyday life. Most people with a disability (78%, or 15% of the total population) were restricted in one or more of these core activities.

As the overall population ages, more and more of us will experience restrictions in our daily lives. New development must be designed for people with disabilities.

Objectives
To ensure that all residents and visitors, including wheelchair users and those with a disability, are able to easily reach and enter all publicly accessible parts of a building, including retail stores, buildings, communal areas and apartment lobbies.

Performance Criteria

i. Achieve building/retail/commercial entrances which are flush with the footpath/external ground level or provide a suitably ramped alternative.

ii. Provide appropriate access and facilities as set out in Australian Standard AS 1428 (parts 1 & 2).

iii. Use appropriate gradients and materials, including slip resistant materials, tactile surfaces and contrasting colours.

4.5 Access & Parking

4.5.1 Access for Vehicles - Rights of Carriageway

The Roads and Traffic Authority has advised that new vehicular access to developments fronting Anzac Parade will not be permitted via Anzac Parade. Vehicular access for land within the Town Centre should be via alternate roads such as rear lanes and side streets.

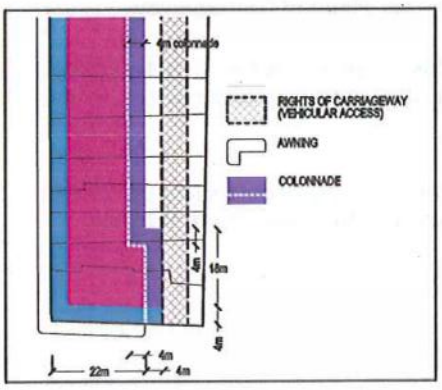
The narrow width of lots, the lack of rear lanes, and current land ownership patterns makes this quite difficult. As the RTA will not permit new vehicular access to developments fronting Anzac Parade it is necessary to make provision for alternate means of access. Due to the configuration of blocks, and current development patterns, rear lane access and direct access from side streets is only available in limited circumstances. Rather than force the dedication of laneways as public roads as part of redevelopment, this Plan is formulated on the basis of the creation of co-ordinated development within blocks, with access gained from side streets via Rights of Carriageway.

The timing and order of development of land in the Town Centre, particularly land fronting Anzac Parade, will depend on market forces and the ability of land owners to successfully negotiate with adjoining property owners to achieve reciprocal Rights of Carriageway created under Section 88B of the Conveyancing Act 1919. These Rights of Carriageway will allow **below ground** (semi-basement or basement) access across adjoining properties for owners, residents, staff, visitors, customers and service vehicles.

Given requirements for minimum site frontages and areas for redevelopment, the reciprocal Rights of Carriageway should result in interconnected semi-basement and basement car parking (not tunnels). Effectively, those driving along the Rights of Carriageway will experience the common everyday experience of driving through a carpark.

The location of below ground (basement or semi-basement) Rights of Carriageway is indicated on the Block by Block Controls.

Basement and semi-basement carparks in the Town Centre will be interconnected, and those using the Rights of Carriageway are likely to feel they are driving through a single basement or semi-basement carpark.



Opportunities exist for individual owners to join together to either sell their land for a single coordinated development or to develop together in a coordinated fashion. For example, a mixed-use retail/residential development could be developed as a Strata Titles or Community Titles scheme with any common access way being part of the Common Property of the scheme, rather than a Right of Carriageway.

Applicants should note that if an individual owner within a development block refuses to grant a Right of Carriageway to benefit adjoining properties then a legal avenue exists under Section 88K of the Conveyancing Act 1919 for an aggrieved land owner to commence proceedings in the Supreme Court to seek an order of that Court granting the right of access across an adjoining property in circumstances where such access is necessary for the reasonable development of such land.

4.5 Access and Parking

4.5.1 Access for Vehicles - Rights of Carriageway

Objectives

- To achieve vehicular access to land within the Town Centre via driveways from side streets and below ground Rights of Carriageway privately negotiated by adjoining property owners or from co-ordinated access within the development.
- To facilitate traffic management in the Town Centre.
- To minimise the number of vehicle access points and maintain traffic flow.
- To maximise retail frontages and streetscape presentation.
- To maximise pedestrian safety.

Performance Criteria

i. Unless otherwise indicated on the Block by Block Controls, direct vehicular access from Anzac Parade is not permitted.

ii. Provide 6 metre wide two way vehicle access via existing rear lanes, new below ground rear Rights of Carriageway or side streets as indicated on the Block by Block Controls.

iii. Negotiate with adjoining property owners to achieve below ground Rights of Carriageway in the locations indicated on the Block by Block Controls.

iv. Provide driveways and below ground rear Rights of Carriageway which are a minimum of 6 metres in width.

v. Design driveways to basement and semi-basement parking to minimise visual impact on the street and maximise pedestrian safety. Setback any garage doors from the street alignment.

vi. Design driveway ramps and entrances to mitigate against any potential for flooding.

vii. Do not locate access ways to basement or semi-basement driveways adjacent to the doors or windows of habitable rooms.

viii. Submit, as part of the Development Application, evidence of adjoining property owners' agreement to the rear Right of Carriageway.

ix. If agreement cannot be reached, submit evidence that an action under Section 88K of the Conveyancing Act 1919 has commenced in the Supreme Court.

x. Alternatively, submit evidence that rear access forms part of the Common Property of a Strata Titles or Community Titles scheme.

4.5 Access and Parking

4.5.2 On-site parking

New development within the Town Centre will be constrained unless applicants can provide adequate on-site parking, which will relieve existing or potential pressure on residential streets.

Excavation to achieve underground parking is constrained by the Town Centre's high water table. Semi-basement parking, where the carpark roof is slightly above ground, can reduce excavation costs and minimise the impact on the water table.

Semi-basement parking also has the potential to provide a podium for landscaped open space at the rear of new development.

An outlook over a landscaped open space will be more pleasant for residents and neighbours than an outlook over a surface parking area, as well as creating opportunities to achieve appropriate levels of development within the Town Centre.

Special care is appropriate when underground car parking areas are situated on a floodplain. These structures can fill rapidly if floodwater commences flowing down the basement access ramp, with significant risk to life and property. A risk management approach should be adopted that includes a consideration of the full range of possible flooding.

Wherever modelling techniques are used to identify potential flooding impacts, model selection should consider the complexity of existing and future flow patterns. Model extents should have regard to computational stability at the boundary, and the need to identify possible effects on flooding upstream and downstream of the immediate site of the proposal.

Note that the Department of Land and Water Conservation has a statutory involvement where a proposed development intersects a shallow permanent water table and pumping is necessary to lower the water table to permit construction to proceed. DLWC will not endorse continuous extraction of groundwater i.e permanent dewatering around a development site because it does not consider continuous extraction to be environmentally sustainable.

However, DLWC will consider approving temporary dewatering provided that the final design of basement areas is water-proofed or fully tanked to prevent ingress of groundwater.

☒ *An outlook over surface parking is not the desired outcome for Town Centre residents*

√ *A landscaped view is more pleasant than a view of surface parking.*

4.5 Access and Parking

4.5.2 On-site parking

It is recommended that applicants assemble the following information to enable DLWC to assess proposals and prepare General Terms of Approval under the Integrated Development Legislation (Section 91 Environmental Planning & Assessment Act) as well as licence conditions under the Water Act:

- The proposed method of dewatering e.g. pumping from the excavation or a battery of spearpoints around the perimeter of the development site and a plan to scale showing the location of the work(s);
- The proposed amount by which the water table will be lowered;
- An estimate of the quality of the groundwater including advice on the presence of any contaminants;
- The proposed method of disposal of the tailwater e.g. via street drainage to stormwater system;
- An estimate of the total volume of groundwater to be pumped from the site (by number of kilolitres/megalitres) as well as the instantaneous pumping rate (litres per second) and duration (number of days/weeks/months); and
- A professional geotechnical risk assessment of the potential off site impacts (surrounding buildings or infrastructure) e.g. due to sand compaction and differential surface settlement following pumping.

Objectives

- To provide on site parking for commercial users, residents and visitors.
- To ensure that on-site parking does not significantly affect the groundwater system.
- To ensure that carparking access and garaging do not dominate the street or the site.
- To integrate parking facilities with the overall site planning and maximise on-site open space.
- To ensure that development makes adequate provision for service and delivery vehicles, including access circulation, manouvering, safety and headroom.

4.5 Access and Parking

4.5.2 On-site Parking (cont'd)

Performance Criteria

i. Comply with *Randwick City Council Development Control Plan: Parking*. The minimum dimensions for carpark design and layout must be based on the dimensional requirements of a service Van as described in the *Randwick City Council DCP: Parking*.

ii. Tandem or stack parking (maximum two spaces) is permitted where these spaces are attached to the same strata title comprising a single apartment, subject to the maximum parking limit applying.

iii. Council may consider:
- a limited number of stack parking spaces (maximum two spaces) for staff parking associated with retail uses; and
- stack parking spaces (maximum two spaces) for other non-residential purposes subject to suitable management arrangements such as valet management of those spaces.

iv. Incorporate parking within and/or beneath the building. No on-site parking is to be provided on a street frontage nor as surface parking external to the building.

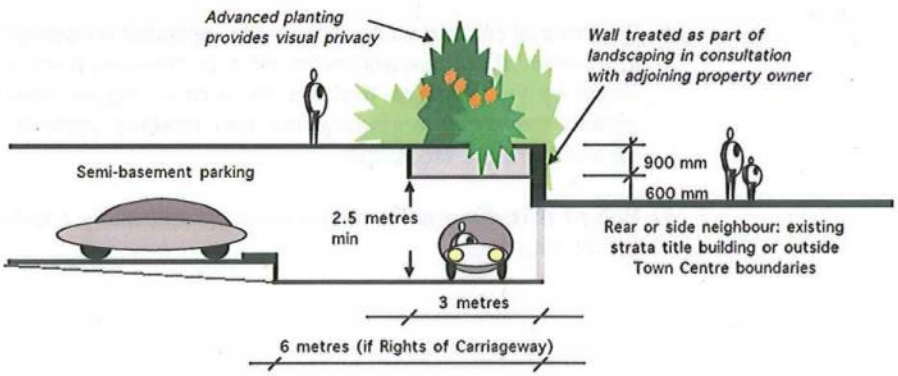
v. Design parking to ensure pedestrian safety.

vi. Provide on-site Bicycle Parking in accordance with *Randwick City Council Development Control Plan: Parking*.

vii. Carparking areas may be designed as semi-basement car parking provided that:
- The roof is not more than 1.5 metres above ground level;
- The roof is landscaped as Communal and/or Private Open Space;
- The design results in building frontages that are level with the street.

viii. Where the roof to a semi-basement carpark abuts with a street frontage, ensure that the roof is no higher than 900mm above ground level, measured across any sloping frontage.

ix. Where a semi-basement carpark is built to the boundary of an adjoining property outside the Town Centre boundary, or built to the boundary of a strata title building unlikely to change, provide advanced planting in a 3 metre setback from that boundary, to achieve visual privacy, as shown in the following diagram.

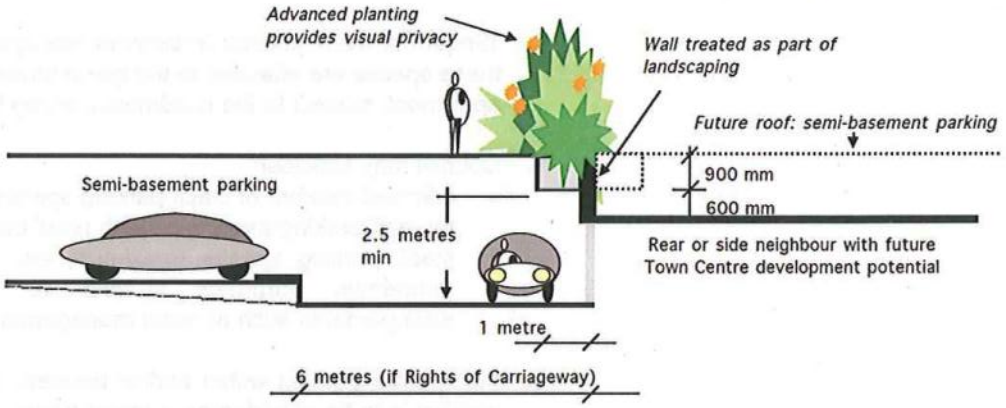


4.5 Access and Parking

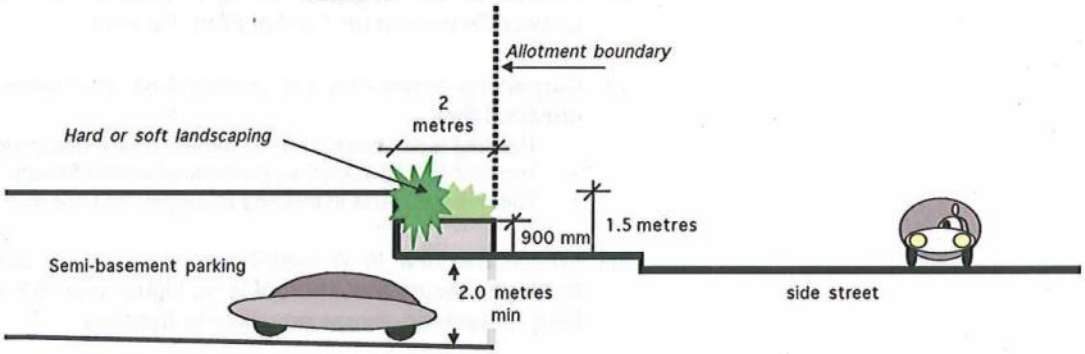
4.5.2 On-site Parking (cont'd)

Performance Criteria

x. Where a semi-basement carpark is built to the boundary of an adjoining property with future Town Centre development potential, provide advanced planting in a 1 metre setback from that boundary, to achieve visual privacy, as shown in the following diagram.



xi. Where the semi-basement carpark adjoins the footpath, provide soft or hard landscaping to finish the 1.5 metre wall to that footpath, to achieve an attractive streetscape edge, as shown in the following diagram. Alternatively, this area may be used for suitably ramped access.



xii. Include natural ventilation to basement and semi-basement car-parking. Integrate ventilation design into the façade of the building, or parking structure, treating it with appropriate features such as louvres, well-designed grilles, planting or other landscaping elements.

xiii. Ensure that all new walls adjacent to vehicular crossings are lowered to a height of 600mm above the internal driveway level or splayed 1.5 metre by 1.5 metre so that the driver of a stopped vehicle 2 metres behind the street boundary line can observe pedestrians up to 2 metres from the crossings.

xiv. Submit a Traffic and Parking Analysis prepared by a suitably qualified Traffic Engineer.

4.6 Buildings - Exterior

4.6.1 Active Frontages

An active Town Centre relies on: local residents who provide demand for local goods and services; street level retail and commercial activities which enliven the street by day and by night; interactivity between commercial uses and the public domain; choices of access; good presentation; safety and comfort; and sociability.

Active frontages have a positive influence on the safety and security of an area, by providing casual surveillance and by improving the perception of safety. People are more inclined to walk along pleasant, active streets.

Objectives

- To provide a walkable environment, with visual interest and a feeling of security.
- To provide a range of uses to engage and activate the street and contribute to the economic viability of the Town Centre as a whole.
- To maximise building openings and minimise the extent of blank walls on to the street, especially at ground level.

Performance Criteria

i. Provide continuous retail frontage on the ground floor within the Core Retail Precinct.

ii. Maximise street level activity, for example by wrapping shopfronts around corners.

iii. Minimise blank walls at ground level. Allow for visual interest such as retail display cases on the external face of fire escapes, service doors and equipment hatches.

iv. Maximise glazing for retail uses, but break large glazed shopfronts into discrete sections.

v. Do not use opaque or reflective glass on the ground floor.

vi. Use grilles or transparent security shutters with a minimum of 70% transparency on retail frontages. Solid shutters are not permitted.

vii. Entrances to internally orientated shopping or commercial arcades, and the arcades themselves, must be a minimum of 7 metres wide.

4.6 Buildings - Exterior

4.6.2 Awnings

Awnings improve the shopping experience by providing weather protection and by creating a pedestrian scale. They play a role in sheltering passengers waiting at bus stops and travelling to and from bus stops.

Awnings also offer a good opportunity to create architectural detail and contribute to the character of the street.

Objectives

- To provide shelter and amenity for pedestrians on public streets.
- To reinforce an existing coordinating feature of the Town Centre.
- To provide continuity in the streetscape.

Performance Criteria

i. Provide continuous street frontage awnings to all new development, to the extent indicated on the Block by Block Controls. Generally awnings should be 3 metres deep.

ii. Setback awnings a minimum of 600mm from the kerb.

iii. Align new awnings with the general alignment of existing awnings in the street.

iv. Design awnings to be complimentary, one with another.

v. Cantilever awnings from the buildings with a minimum soffit height of 3.5 metres.

vi. Use under-awning lighting, to improve public safety.

vii. Canvas blinds along the street edge are permitted. Signage on blinds is not permitted.

viii. Colonnades are not permitted along Anzac Parade frontages.

ix. When Reconstructing existing awnings of Contributory Buildings, follow the principles of the Burra Charter.

New awnings aligned with existing

4.6 Buildings - Exterior

4.6.3 Building Entrances

Entrances define the threshold between the public street and private areas within the building. They are usually part of the building, as well as part of the external space. Entrances may lead into a common entry or directly into the private space of an apartment from the street.

Objectives

- To create entrances which provide identifiable, desirable residential amenity.
- To orient visitors.

Performance Criteria

i. Provide clearly identifiable, sheltered, well lit and safe spaces to enter the building, meet and collect mail.

ii. Achieve clear lines of transition between the public street, the shared private, circulation spaces and apartments.

iii. Provide visual connections between the internal and external spaces of building entrances.

iv. Provide clear lines of sight between one circulation space and the next.

v. Design entrances and associated circulation spaces of an adequate size, having particular regard to the movement of furniture between public and private spaces.

vi. Provide separate entrances, where possible, for pedestrians and vehicles, commercial and residential occupants, and ground floor apartments.

4.6 Buildings - Exterior

4.6.4 Facade Composition and Articulation

Since the majority of people experience buildings from the outside, facades have an important role to play in the perception and feeling of a place. The role applies not only to individual buildings but also to a collection of buildings within a street.

Visual interest in many older buildings is derived from: the articulation of the façade into horizontal divisions of bottom, middle and top; balcony and fenestration details; proportions and spaces; and 'modelling' of the surface through detail and relief.

The Vision for the Kensington Town Centre as a grand boulevard requires and deserves this attention to detail and relief in the design of facades for new development. As a rule of thumb, detail and articulation should enable a resident to readily identify his or her apartment from street level, outside the building. However, 'gimmicky' attempts to achieve detail through random placement of colours and elements are not suitable.

The process of development along Anzac Parade will sometimes leave party walls exposed where new development abuts existing, lower buildings. Care must be taken to ensure that any exposed party walls are not left as stark, blank walls until adjoining development occurs.

Objectives

- To ensure that new developments have well articulated and harmonious facades which define the public domain.
- To ensure that building exteriors reinforce the character and continuity of the Town Centre streetscape.
- To ensure that the process of development achieves a consistently attractive streetscape.
- To achieve a 'human scale' within the Town Centre.

Performance Criteria

i. Ensure that each building has a unique identity.

ii. Design buildings to address the street, but ensure that rear and side facades also provide visual interest to the street and surrounding neighbours.

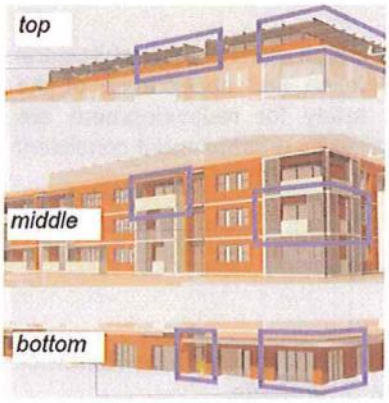
iii. Compose the façade with an emphasis on vertical elements.

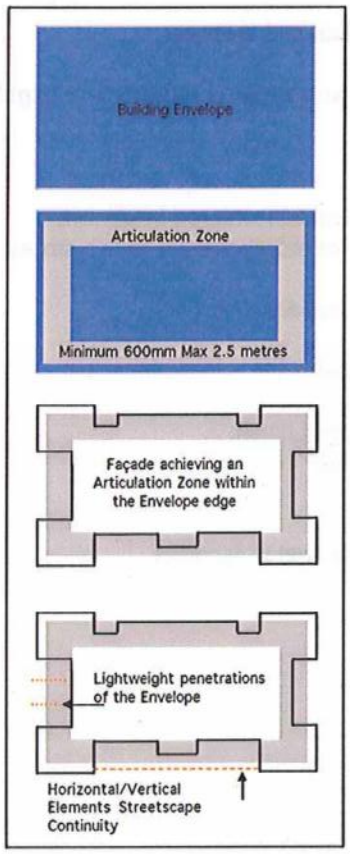
iv. Adopt a modular form, ideally one which reflects the underlying narrow built form of Contributory Buildings (6 - 8 metres). Use vertical elements such as vertically proportioned windows, exposed party walls, attached piers, vertical balustrades, attached columns or fins to express this modulation and rhythm, particularly for the top of the building. Use horizontal elements such as roofs, parapets, balconies and balustrades, eaves lines, string courses, cornices and door/window heads to align the building with its neighbours.

v. Provide architectural features which give a 'human scale' to the building, particularly at street level.

4.6 Buildings - Exterior

4.6.4 Facade Composition and Articulation (cont'd)





vi. Ensure that the façade expresses a tripartite arrangement which clearly indicates a bottom, middle and top related to the overall proportion of the building. Generally, the bottom will read as the area below the awning, and the top will read as the uppermost, setback storeys.

vii. Use proportions sympathetic with Contributory Buildings in the Town Centre.

viii. Incorporate design characteristics such as: projecting fins; corbelling and string courses; balconies with variable materials and finishes; 'punctuated walls' with visually recognisable patterns, decorative features, rhythm and texture; and a variable colour palette to achieve façade modulation and articulation.

ix. Use windows of vertical proportion. Pure proportions such as squares and 'Golden Sections' (*see Definitions and page 97*) may be appropriate when used in a vertical context.

x. Ensure that the composition of a building façade or a series of facades forms a rhythm that complements and is harmonious with the streetscape.

xii. Achieve an Articulation Zone with a minimum depth of 600mm and a maximum depth of 2.5 metres through physical articulation of the facade.

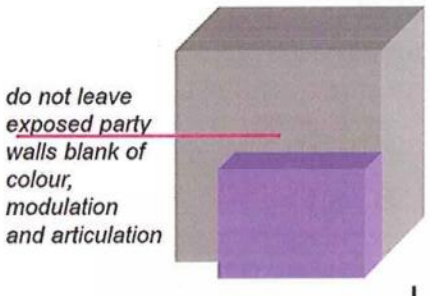
xii. Incorporate balconies and terraces into the Articulation Zone. For more information see 'Private Open Space' on page 126.

xiii. To maintain continuity of facades along the streetscape, lightweight structures such as sunshading devices may extend to the Building Envelope Line.

xiv. To enhance the articulation, lightweight structures, sunshading devices, or horizontal and vertical architectural elements including balconies may penetrate the Building Envelope (but not the property line) by a maximum of 600mm.

xv. Avoid curtain walling, large expanses of glass and large expanses of concrete as these do not create well articulated and harmonious facades.

xvi. Where new development leaves exposed party walls adjacent to existing, lower buildings, improve the appearance of the exposed section of the party wall with colour, modulation, and articulation. Windows may be incorporated on the understanding that they are likely to be covered, over time, by adjoining development.



4.6 Buildings - Exterior

4.6.5 Materials and Finishes

The Town Centre currently comprises a haphazard palette of materials, finishes and colours.

New development is expected to achieve a high standard of architectural character, to improve the overall presentation and appearance of the streetscape. Older buildings not yet ready for redevelopment are encouraged to re-invigorate their presentation by refurbishment consistent with standards for new development.

Objectives:

To achieve a stylish, coherent streetscape

Performance Criteria

i. Comply with colours, finishes and materials identified in the Randwick City Council *Kensington Town Centre Style Guide*.

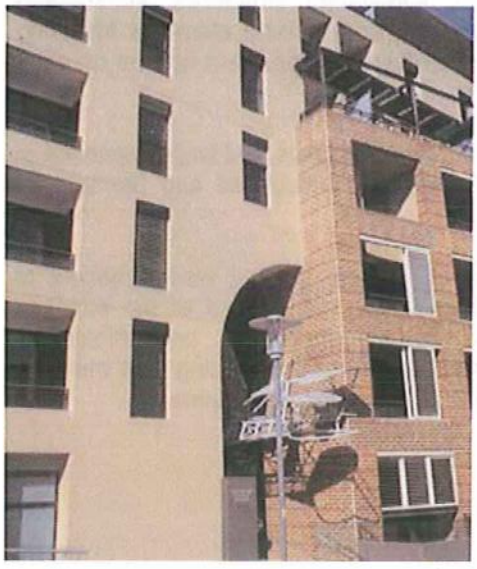
ii. Utilise high quality and durable materials and finishes.

iii. Use pastel or earthy colour schemes and avoid corporate and bright colours.

iv. The following materials are preferred:
   Dry pressed face bricks and/or coloured rendered brickwork
   Light weight material may be considered above the fourth storey;
   Plain Glass windows; and
   Window frames to achieve a solid appearance

v. The following materials are incompatible:
   Large wall tiles;
   Rough textured render and or bagged finish;
   Polished metal and curtain walls; and
   Reflective glass.

vi. Avoid large expanses of any single material to facades.



Combining different materials and finishes in a co-ordinated palette can achieve pleasing results

4.6 Buildings - Exterior

4.6.6 Outdoor Eating

Outdoor eating areas create street level interest and variation to enrich the visual experience of pedestrians. They create opportunities to meet friends and observe the liveliness of the Town Centre. The State Transit Authority notes that the use of footpaths for this type of social interaction can improve the use of public transport by increasing passive surveillance of waiting passengers and adding to their feelings of personal safety. Careful placement of outdoor dining furniture will ensure that conflicts are not created with access to bus stops.

Objectives

- To encourage a lively streetscape.
- To provide opportunities for social interactions.
- To increase passive surveillance of the street whilst ensuring good access to bus stops.

Performance Criteria

i. Comply with Randwick City Council's Outdoor Dining Development Control Plan.

ii. Incorporate outdoor dining in café and/or restaurant developments.

iii. Provide lighting and/or heating for evening and night-time use.

iv. Allow 2.0 metre clear walkway between the shopfront and outdoor seating.

v. Provide planter boxes or another suitable treatment to define the area at the kerb line.

4.6 Buildings - Exterior

4.6.7 Public Art

Public art brings the vision and talent of artists out of galleries and museums to the local community. Public art installations can include paving treatments, lighting design, sculpture, fencing design, decorative elements of electrical and engineering work, and themed landscaping and planting works.

Public art can celebrate local heritage, explore community cultural identity and set the mood for city spaces. It can be a functional means of making design elements such as seating, paving, bus shelters and other street furniture visually appealing.

Public art projects are sometimes designed to include participation by the local community in the design or making of certain elements.

Five appropriate public art themes have been identified for the Town Centre:

- The thematic journey along Anzac Parade;
- The culture of racing;
- The university associations with youth culture and learning;
- Everyday life; shopping; meeting friends; going to school; and
- The local ecosystem and environmental themes, including the historic values of the Centennial Parklands.

Council encourages and supports the implementation of public art projects that reflect these themes.

Objectives

- To reinforce the cultural identity of the Kensington Town Centre.
- To enhance the pedestrian environment.
- To better define orientation points within the Town Centre.
- To facilitate the implementation of public art projects as detailed in the Kensington Town Centre Public Domain Improvements Strategy.
- To encourage artworks that are integrated into the broader development and planning.
- To avoid stand-alone projects that fail to address the locality, its history and its culture.

Performance Criteria

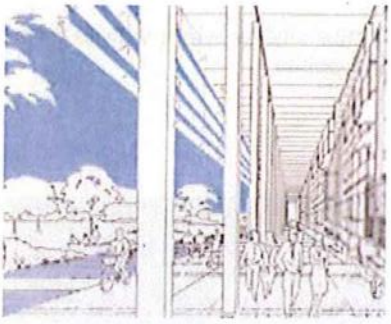
i. Refer to the Kensington Town Centre Public Domain Improvement Strategy. Works identified in this Strategy have been included in the Section 94 Works Program. Development will be levied monies relating to specific material public benefit as identified in Council's s94 Contributions Plan.

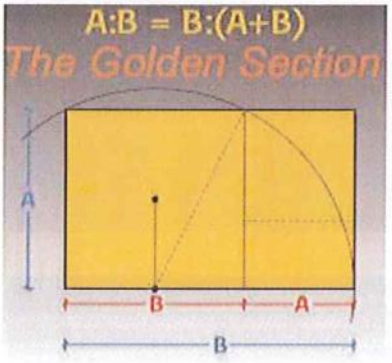
ii. Where relevant, applicants will be required to provide local area improvements, including public art, in lieu of Section 94 monies. This work will be carried out in consultation with and to the satisfaction of Council.

4.6 Buildings - Exterior

4.6.8 Rear Colonnades

The slim building footprints required by this Plan could reduce the incentive to articulate the rear facades of Anzac Parade buildings. Rear colonnades provide the opportunity to stagger internal spaces on residential levels, increasing the options available to apartment designers and increasing the ability to design an articulated rear facade.
Rear colonnades also provide opportunities for separate access to residential apartment lobbies, reducing the need to provide access from Anzac Parade.





Objectives

- To provide opportunities to maximise retail frontages.
- To soften the appearance of rear façades by achieving building articulation.
- To maximise opportunities for Communal and/or Private Open Space at ground level and Private Open Space on upper residential levels.
- To maximise design flexibility for residential levels.

Performance Criteria

i. Include rear colonnades where shown in the Block by Block Controls.

ii. Design rear colonnade dimensions using the proportions of the Golden Section 1:1.618. *(See diagram at left, and Definitions)*

iii. For Anzac Parade development, design a rear colonnade 4 metre wide, and approximately 6.7 metres clear height.

iv. For Transitional development design a rear colonnade 3.5 metre wide, and approximately 5.7 metres clear height.

v. Design and treat colonnades as Communal Open Space.

vi. Do not orient the back door or service areas of retail/commercial spaces onto colonnades.

vii. Consider the use of colonnades as access points to residential apartment entry lobbies.

viii. Ensure that colonnades are well-lit, safe and landscaped areas.

ix. Connect colonnades to streets and between interconnecting adjacent buildings to provide continuous pedestrian flow. Security access may be provided at the street entries.

x. Generally, the dimensions between columns should reflect the Golden Section proportion.

xi. Where all parking is provided at basement rather than semi-basement level, Council may consider a rear colonnade 3 metres wide and 4.8 metres clear height, subject to design.

4.6 Buildings - Exterior

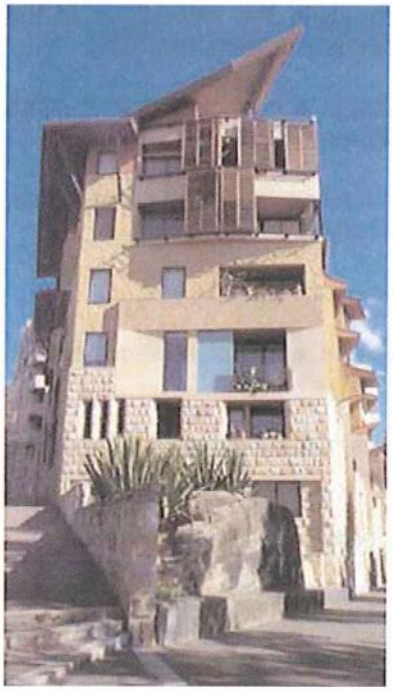
4.6.9 Roof Forms

The maximum building height in the Kensington Town Centre specifically refers to the 'underside of the topmost ceiling' rather than the uppermost area of the roof. This control is designed to encourage a range of roof forms and parapets which can contribute to the skyline or silhouette of the Town Centre.

Objectives

- To achieve design excellence in roof forms which contribute to the existing character of the centre.
- To add visual interest to the Town Centre skyline when viewed from street level or surrounding key vantage points.

√ Roof forms should add visual interest to the Town Centre skyline



4.6 Buildings - Exterior

4.6.9 Roof Forms (cont'd)

Performance Criteria

i. Wholly contain lift over-runs and service plants within roof structures or roof lines.

ii. Minimise the bulk and mass of roofs and their potential for overshadowing.

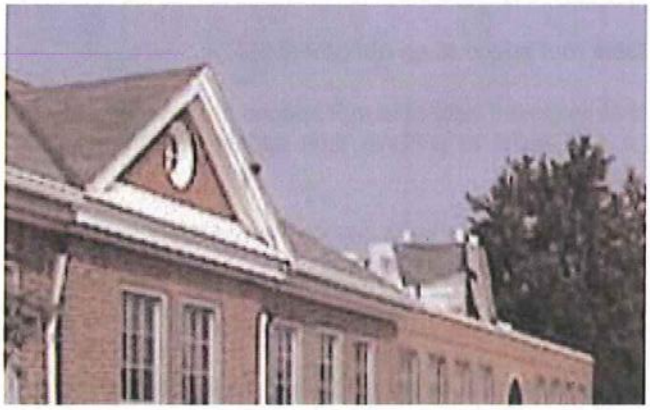
iii. Design roofs to generate an interesting skyline and enhance views from adjoining developments.

iv. Relate roofs to the size and scale of the building, the building elevation, and the three dimensional building form.

v. Consider providing landscaping and appropriately shaded areas on flat roofs.

vi. Avoid attic windows and dormer windows in the roof.

X *Service structures should not be visible from the street.*



X *Avoid domestic roof forms, those that imitate Historic styles, and predominantly flat roofs*

4.6.9(a) Habitable Roof Space

Well-designed roofs can sometimes create opportunities for habitable spaces, as well as opportunities to conceal mechanical structures such as lift overruns and service plants.

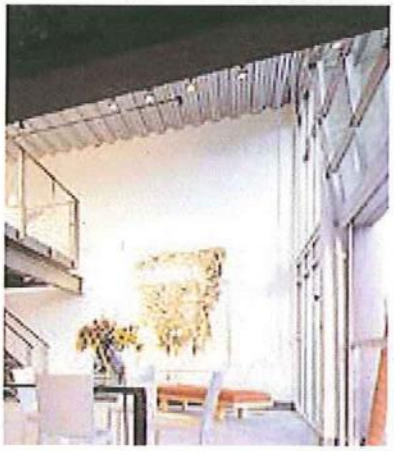
The environmentally sustainable crossover style apartments encouraged by this Plan rely on limited corridors and lift lobbies which will generally occur on the 3rd and 6th storeys. Unless well designed, this could generate development proposals with unsuitably small apartments on the upmost storey. Habitable roof spaces connected to the spaces below by internal stairs could be a viable design option provided they are designed within an interesting roof form and are not regarded by applicants as an opportunity to achieve an additional storey in the development.

4.6 Buildings - Exterior

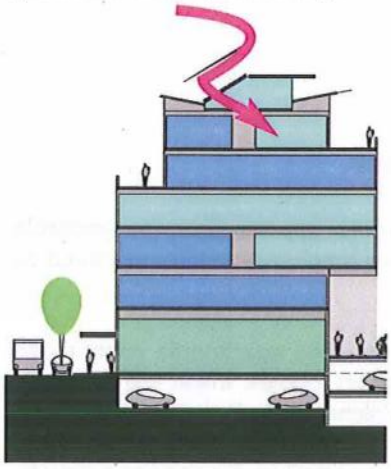
4.6.9(a) Habitable Roof Space (con'td)

Objectives

- To provide for a comprehensive mix of apartment types by creating opportunities for the design of larger apartments on the upmost storey.
- To provide opportunities for efficient apartment design within the constraints of environmental sustainability.
- To ensure that habitable roof spaces and roof plant and service areas are not visible from adjoining public roads or private property.
- To ensure that habitable roof spaces are a result of roof forms rather than 'pseudo' storeys.



Habitable roof spaces can optimise the effectiveness of crossover style apartment layouts, providing an 'attic' style space connected to an apartment on the topmost storey.



Performance Criteria

i. Development Applications which propose habitable roof spaces will be submitted to a Design Review Panel for assessment of the design merit of the whole application. The Design Review Panel will be selected by Randwick City Council.

ii. Connect habitable roof space to an apartment below.

iii. Demonstrate that proposed habitable roof spaces optimise apartment mix and layout and assist to achieve dual aspect apartments with natural ventilation.

iv. Demonstrate that the total floor area devoted to habitable roof space does not exceed 40% of the floor below.

v. Wholly contain habitable areas within the roof space.

vi. Ensure that, when viewed from an adjoining public road or private property, the roof form (including habitable roof, associated private open space or plant and service areas) has the appearance of a roof and not an additional storey or an extension of the external vertical facade.

vii. Design windows to habitable roof spaces as an integral element of the roof i.e. avoid attic and dormer windows.

viii. A continuous flat roof with habitable space within it will be regarded as a pseudo storey and will not be approved.

ix. Submit perspectives prepared by a suitably qualified person (Architect, town planner, etc) showing front and rear elevations of the development viewed from the ground level across the street at the frontage and at least 30 metres from the building footprint at the rear, to provide clarification that any habitable roof space does not appear as an additional storey. These perspectives should be computer generated and submitted in disc form to enable Council to check accuracy.

4.6 Buildings - Exterior

4.6.10 Signage

Signage plays a significant part in indicating retail and commercial uses and in creating a lively retail strip. Signage in the Town Centre should be integrated into the design of the new buildings.

Objectives

- To ensure that signage is in keeping with the development in scale and quality.
- To enhance the visual quality of the streetscape.

Performance Criteria

i. Comply with Randwick Councils outdoor Advertising DCP and SEPP No. 64 (Advertising and Signage).

ii. Protect the visual quality and the amenity of the streetscape.

iii. Ensure that signage does not:
   - obscure important architectural features;
   - dominate the architecture of buildings;
   - protrude from, or stand proud of, the awnings;
   - project above any part of the building to which it is attached;
   - cover a large portion of the building façade.

iv. Fin signs and projecting wall signs are not permitted.

v. One sign is permitted for each shop front. Incorporate the Kensington Town Centre logo into the sign.

4.6 Buildings - Exterior

4.6.11 Solar Access, Overshadowing & Natural Daylight

Solar access is a major determinant of personal environmental comfort. Good passive solar design offers a resource and financial benefit by reducing the need for artificial heating and cooling. New development must also recognise that existing adjacent buildings require reasonable access to sunlight for living spaces, and private and public open spaces.

Objectives

- To minimise the negative impact of overshadowing on the internal and outdoor areas of neighbouring buildings.
- To optimise solar access to habitable rooms and to minimise the need for artificial lighting during daylight hours.
- To retain the amenity of the public domain by maximising solar access.

Performance Criteria

i. Maintain sunlight access to private and public open spaces and habitable rooms of adjoining development for at least 3 hours between 9 am and 3.00 pm on 21 June. If existing sunlight access to adjoining development is already below this level, maintain whatever exists.

ii. Ensure that building layouts facilitate good solar access to both internal and external living spaces e.g. ideally locate living areas to the north and service areas to the south and west of the development.

iii. Maximise any northerly aspect and optimise the number of north facing windows. Shade north facing windows with roof eaves, verandahs or balconies, awnings or other horizontal shading devices.

iv. Provide adjustable shade devices suitable for lower sun angles (e.g louvres/blinds) to openings on the eastern and western facades.

Adjustable shade devices can provide architectural interest as well as optimising solar access.

4.6 Buildings - Exterior

4.6.11 Solar Access, Overshadowing & Natural Daylight (cont'd)

v. Incorporate appropriately designed double glazed or energy efficient glass skylights and clerestory windows to improve daylight levels wherever possible.

vi. Do not use skylights as the only source of daylight and/or natural ventilation for habitable rooms.

vii. Light shelves (horizontal surfaces incorporating window openings which reflect light into the ceiling of the interior) are recommended for buildings which exceed 14 metres in depth.

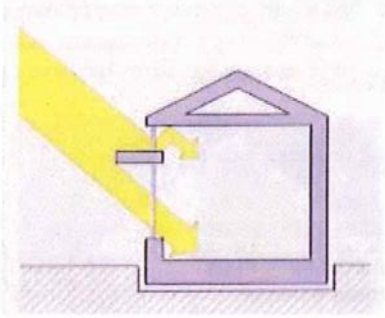
viii. Do not use coloured/opaque glass as a shading device.

ix. Provide maximum daylighting to entrance lobbies, living spaces, corridors, kitchens, bathrooms and open spaces.

x. Protect roof terraces with shade cloth, planting, pergolas and/or vergolas.

xi. Ensure that living spaces of at least 75% of apartments in any new development receive a minimum of 3 hours of sunlight between 9am and 3pm on 21 June, unless existing overshadowing prevents this.

xii. Submit shadow diagrams prepared by a suitably qualified person (Architect, Engineer, Town Planner etc) indicating the extent of overshadowing of apartments within the development, of adjoining development, and of public and communal open space, with each Development Application.



Light shelves are horizontal surfaces that can bounce light through windows into the ceiling of the interior.

4.6 Buildings - Exterior

4.6.12 Street Corners

Buildings on street corners are important both in terms of 'way finding' and 'place making'. Well defined corners assist pedestrians to orient and define their own position within a precinct.

Objectives

- To ensure that corner buildings, which by their location are often highly visible, are well designed and respond to the different characteristics of the streets they address.
- To strengthen the way-finding attributes of corner properties, highlight the location of intersections, and define a clear skyline.

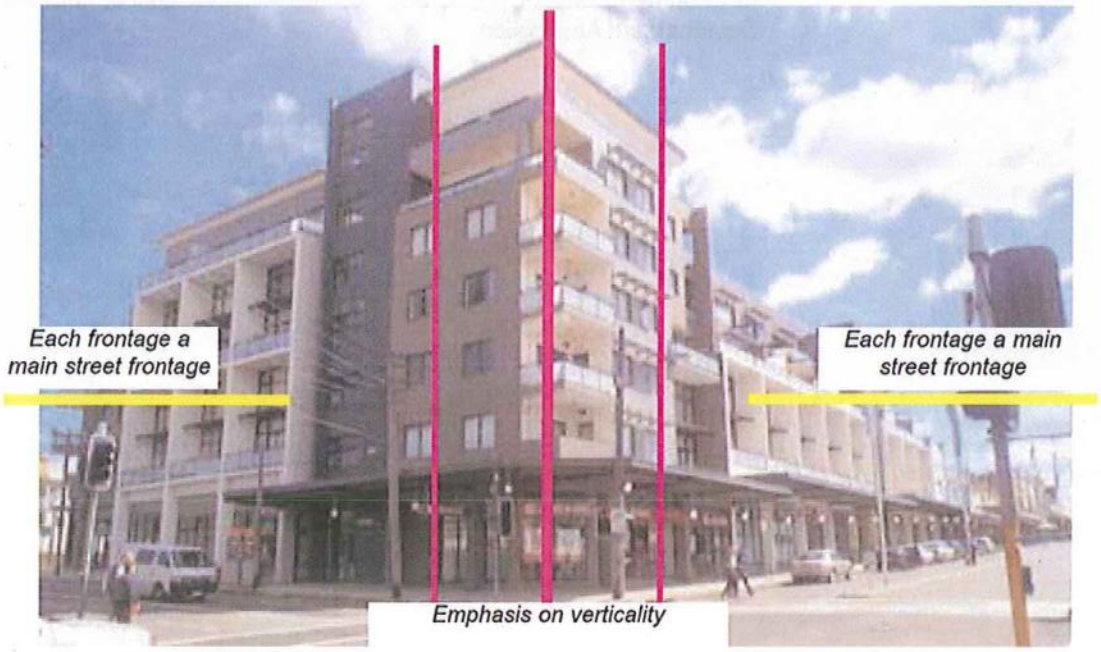
Performance Criteria

i. Generally the preferred design outcome for an Anzac Parade street corner will include a certain element of 0 metre setback for the upper storeys. The depth of this corner element will vary from Block to Block as a result of design.

ii. Emphasise verticality at corners, if possible by concentrating the tallest portion of the building on the corner itself. Utilise design devices such as increased wall heights, splayed corner details, increased height, expression of junction of building planes and other architectural features to reinforce the way finding attributes of street corners.

iii. Design corners to add variety and interest to the street and clarify the street hierarchy.

iv. Present each frontage of a corner building as a main street frontage.



4.6 Buildings - Exterior

4.6.13 Visual Privacy

Visual privacy should protect every resident's ability to carry out private functions within all rooms and private open spaces, without compromising the functionality of the outlook, ventilation, and solar access of those private spaces.

When coupled with measures to achieve acoustic privacy, buildings should offer a high quality of residential amenity.

Design windows and balconies to minimise overlooking.

Objectives

- To minimise the direct overlooking of internal and external living areas through: site layout and building layout; location of windows and balconies; design of windows; and use of screening devices.

- To ensure adequate visual privacy to residential developments in the Town Centre and to associated private open space.

Performance Criteria

i. Organise the layout of spaces within the building to achieve visual privacy.

ii. Unless otherwise indicated on the Block by Block Controls, orient primary openings on all developments to the front and rear of the building i.e. towards the street and the rear open space. Minor openings (to non-habitable rooms, secondary bedrooms, kitchens etc in accordance with BCA standards) are permitted along sides of buildings.

iii. Where the separation between buildings is less than 12 metres, use screening devices such as louvres and opaque glass to maximise privacy.

iv. Where possible, locate uses with similar privacy needs close to each other within the building.

v. Design windows and balconies to minimise overlooking into neighbouring apartments, balconies and buildings. Balcony and balustrade design must consider privacy from the street by day and by night, and material should achieve privacy whilst allowing light, air and views.

vi. Offset windows from one building to another building to minimise overlooking.

4.7 Buildings - Interior

4.7.1 Acoustic Privacy

Acoustic privacy, or sound insulation within and between buildings, should be designed in from an early stage. When coupled with measures to achieve visual privacy, buildings should offer a high quality of residential amenity.

Objectives

To ensure adequate acoustic privacy to residential developments in the Town Centre and to associated private open space.

Performance Criteria

i. Design the internal layouts of apartments and the location of courtyards, terraces/balconies and openings to minimise noise transmission.

ii. Locate active areas within an apartment towards external noise sources (e.g. streets), and orientate quiet areas away from noise sources.

iii. Use storage or circulation within apartments to buffer noise from adjacent apartments, mechanical services, and corridors/lobbies.

iv. Minimise noise emissions from all mechanical services and plant rooms by using sound attenuation devices and acoustic rated walls, doors and openings.

v. Minimise the amount of party (shared walls) with other apartments.

vi. Build residential buildings so that the repeatable maximum Laeq (1hour)
   - in naturally ventilated buildings does not exceed: 35dB(A) between 10:00pm and 7:00pm in sleeping areas when the windows are closed, and 45db (A) in windows open condition; *and* 45dB(A) in living areas (24 hours) when the windows are closed, and 55dB(A) in the windows open condition.
   - when doors and windows are shut and mechanical ventilation or air conditioning is operating does not exceed: 38dB(A) between 10:00pm and 7:00pm in sleeping areas; *and* 46dB(A) in living areas (24 hours).

vii. Use construction techniques that pay good attention to sealing air gaps around doors and windows exposed to noise; use acoustic materials wherever possible; use acoustic ventilation devices; and use thicker window glass, operable screened balconies or double glazing.

viii. Minimise the noise impacts associated with: goods and service delivery; waste and garbage collection; and active uses such as restaurants and cafes.

ix. Comply with BCA requirements for acoustic control of airborne noise and impact noise between apartments.

x. Submit a noise and vibration assessment addressing appropriate measures to minimise potential noise and vibration impacts for any proposed residential development (for a model consultant brief refer to the RTA's Environmental Noise Management Manual).

xi. Refer to EPA (1999) 'Environmental Criteria for Road Traffic Noise'.

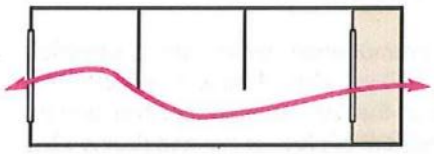
4.7 Buildings - Interior

4.7.2 Apartment Layout

The floor plan layout of residential apartments is the primary design tool for achieving environmental sustainability in terms of natural ventilation and daylight access, and residential amenity in terms of apartment quality.

The quality of the apartment relates to the efficiency of the layout, its environmental qualities, and the social interactions which can be accommodated within it.

An efficient apartment layout should minimise circulation space and be easily furnished. Circulation by stairs, corridors and through rooms should be as short and direct as possible. Room proportions should allow comfortable layout of furniture.



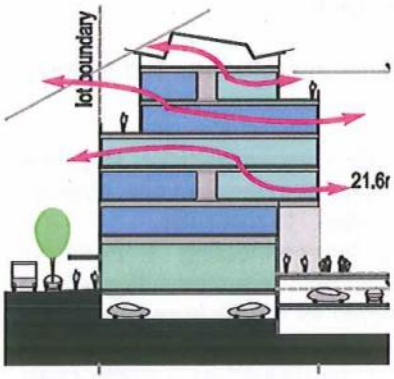
Unimpeded air flow through an apartment is an essential design criteria. Cross-through apartments are the simplest way to achieve a dual aspect

Slim building floor plans and dual aspect apartments provide better sunlight and daylight access and cross ventilation than deep floor plans or single orientation apartments.

Dual aspect apartments can be achieved in a number of ways. 'Cross-through apartments' on a single level extend for the full building depth and have window and door arrangements allowing unimpeded air movement through the full depth of the apartment. Cross-through apartments are sometimes known as single-loaded apartments, to distinguish them from the housing styles of the past, when long corridors with doors 'double-loaded' on either side led to apartments with a single aspect.

Dual aspect can be achieved in a number of different ways

'Crossover' apartments are split or multi-level apartments with at least one level extending for the full building depth.



Crossover apartments minimise corridors and lifts as well as achieving natural ventilation

Objectives

- To ensure that new residential development in the Town Centre achieves high levels of Environmental Sustainability.
- To ensure that apartment layouts are efficient and have high standards of amenity for residents.

Performance Criteria

i. Achieve apartments with dual aspect, to allow the direct flow of air from one side of the apartment to the other.

ii. Use a variety of apartment styles to maximise natural ventilation and access to natural daylight, including:
   - Cross-through apartments
   - Split-level apartments
   - Crossover apartments, which minimise corridors and lift lobbies but provide a dual aspect for natural ventilation

iii. Design apartments to contain minimal circulation areas, ensure comfortable and flexible furniture layouts, promote sunlight access and control, promote daylight penetration, allow for natural cross ventilation, allow for visual and acoustic privacy, and be flexible to suit the requirements of residents.

4.7 Buildings - Interior

4.7.3 Apartment Mix

According to the Australian Bureau of Statistics (Australian Year Book 2001), over the past few decades Australian society has undergone many social changes that have altered the way people live.

People are marrying later and couples are having fewer children. The increase in divorces since changes in the divorce laws in 1975 has led to more one-parent families. Proportionally more people are living alone, either by choice or as a result of divorce, separation or widowhood. Older persons, left alone after the death of their partner, contribute significantly to the numbers of single person households.

The mix of apartments should reflect these social changes.

Serviced apartments and student accommodation, which are residential style buildings catering for longer stay visitors, should have a comparable level of amenity to residential buildings so that any subsequent conversion of serviced apartments to permanent residential stock is not constrained by poor amenity.

Objectives

- To provide a mix of apartment types and size to accommodate a range of household types.

Performance Criteria

i. Provide a mix of Studios, 1 Bedroom, 2 Bedroom and 3 or more Bedroom apartments.

ii. Provide a mix of layouts and sizes, and consider the design needs of those who work from home.

iii. Ensure that Studios and I Bedroom apartments comprise no more than 40% of the total number of apartments.

iv. Design commercial uses to permit future adaptation to, and flexibility for, residential uses.

v. Design serviced apartments and student accommodation to permit future adaptation to conventional apartments in terms of mix, amenity, and all other design provisions of this Plan. In particular:
   - For serviced apartments, two interconnecting 1 Bedroom apartments, or a 1 Bedroom Apartment interconnecting with a Studio apartment, may be considered as a 2 Bedroom apartment provided both apartments are accessible from a shared private lobby. Such an arrangement must be defined as a single strata apartment.
   - For student accommodation, a standard apartment with multiple bedrooms may be designed in such a way that certain bedrooms are separately keyed, in order to satisfy fluctuations in occupancy demand.

4.7.3 Apartment Mix (cont'd)

vi. Applicants should note that any proposals for student accommodation:
- should be accompanied by an operational management plan prepared by an appropriately qualified Social Planner or equivalent; and
- will be submitted for review to an organisation with expertise in the provision of this type of housing e.g. Association to Resource Co-operative Housing or the Office of Community Housing.

vii. Ensure that ground floor apartments comprise a mix of apartment types, where gardens, adaptability and accessibility are more easily achieved for elderly people, families with children, or people living with disabilities.

viii. Provide access for people with a disability to and within one apartment, at the following rates:

0-14 apartments	0
15-29 apartments	1
30-44 apartments	2
45-60 apartments	3 and so on.

ix. Refer to AS 1428 Parts 1, 2 & 4, and the Adaptable Housing Standard AS 4299 for advice about providing accessible environments.

4.7 Buildings - Interior

4.7.4 Apartment Size

According to the Australian Bureau of Statistics (Year Book Australia, 2001), Australian families are becoming smaller, yet new dwellings are getting larger. This apparent contradiction in trends reflects a change in housing standards and aspirations combined with changes in people's living arrangements.

Objectives

- To provide a high quality living environment for all residents, including smaller families and those who wish to live in studio style simplicity.
- To ensure room sizes are adequate for their function.
- To achieve room sizes consistent with the Residential Flat Design Code minimums.

Performance Criteria

Comply with the following minimum Apartment Sizes:

Apartment Type	Area m^2
Studio	40
One bedroom cross-through	50
One bedroom cross over	55
Two bedroom corner	80
Two bedroom cross-through	90
Two bedroom crossover	90
Two bedroom corner with study	120
Three bedroom	125
For each additional bedroom above 3, an additional	20

ii. Minimum Apartment Areas exclude Private Open Space.

iii. Comply with the following minimum Apartment Widths:
- Studios: 3.5 metres clear internal width
- 1, 2 and 3 Bedroom apartments: 4.5 metres clear internal width
- Crossover/cross through apartments more than 18 metres deep: 4 metres clear internal width

iv. Comply with the following minimum Room Dimensions:
- Main Bedrooms: 12 sq metres, with the shortest wall being 3.0 metres long.
- Secondary & Other Bedrooms: 9 sq metres, with the shortest wall being 2.5 metres long.
- Living rooms: 15 sq metres, with the shortest wall being 3.5 metres long.
- Dining rooms: 9 sq metres, with the shortest wall being 2.5 metres long.

v. Demonstrate that a studio has the potential to be combined with another apartment to form a larger apartment.

vi. Submit scale drawings which indicate the furniture layouts of each of the different apartment sizes and styles with every Development Application.

4.7 Buildings - Interior

4.7.5 Building Use

An essential element of the Town Centre vision is that it becomes a vibrant mixed use precinct, with residential, retail and commercial uses in new development. Planning NSW Practice Notes for Improving Transport Choice identify that the co-location of many compatible uses will reduce car travel and increase walking, cycling and public transport use. Locally, traffic congestion will be reduced, air quality improved, and accessibility maximised.

Objectives
To achieve a vibrant and viable mixed use Town Centre

Performance Criteria
Comply with the following unless otherwise specified in the Block by Block Controls:

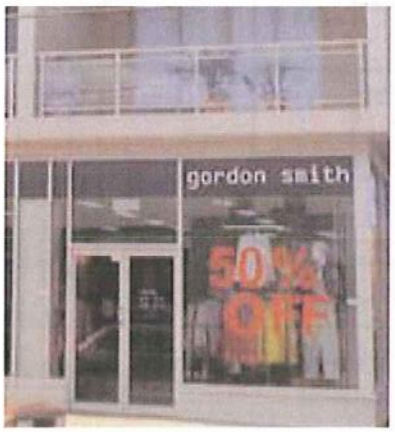
i. Development fronting Anzac Parade & Doncaster Ave
   - Ground Floor: Retail and Commercial uses
   - Storey 2: Commercial and Residential uses (retail uses if justified by an economic impact/assessment study of the Kensington Town Centre)
   - Storeys 3 and above: Residential uses

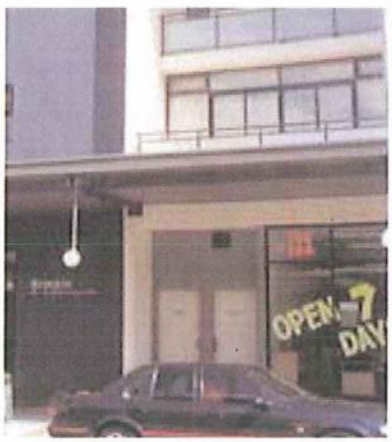
ii. Transitional Development fronting other streets
   - Ground Floor: Commercial uses (retail uses if justified by an economic impact/assessment study of the Kensington Town Centre)
   - Storeys 2 and above: Residential uses

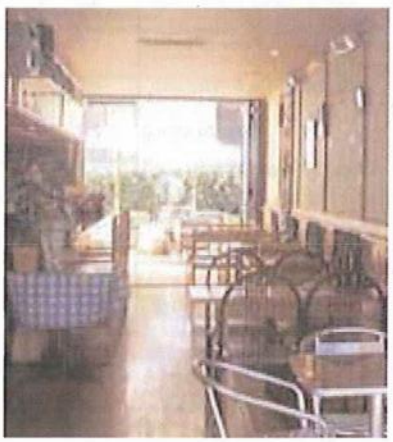
iii. Transitional Development not fronting any street
   - All storeys: Residential uses

iv. Mews Style Development
   - Ground Floor: Retail/Commercial and Residential uses
   - Storeys 2 and above: Residential uses

v. Contributory Buildings
   - Ground Floor: Retail and Commercial uses
   - Storey 2: Retail/Commercial and Residential uses







4.7 Buildings - Interior

4.7.6 Floor to Ceiling Heights

High ceilings, which facilitate light and a sense of space, are important features of well-designed residential apartments. In the Town Centre, where a variety of uses are encouraged at ground and first floor, higher ceilings enable buildings to respond, over time, to demand for alternate uses.

Objectives

- To facilitate natural day lighting and natural ventilation throughout buildings.
- To increase the 'sense of space' in residential apartments.
- To provide maximum flexibility for alternate uses at ground and second storeys.
- To allow building elevations to respond to the street context.
- To ensure that buildings are well-proportioned and aesthetically pleasing.

Performance Criteria

i. Determine the appropriate overall height (measured to the underside of the topmost ceiling) as a response to the Site Analysis.

ii. Unless otherwise indicated on the Block by Block Controls, comply with the following tables, which indicate the minimum and maximum: floor to ceiling; ceiling space and floor slab; and floor to floor heights required to achieve the appropriate overall building height as a relationship between storeys and height.

TABLE 1: TRANSITIONAL DEVELOPMENT NOT FRONTING ANZAC PARADE

			Minimum Building Height to underside of Topmost ceiling	
			15.9	Storey 5
Floor to ceiling	2.7	Floor to Floor		
Ceiling space & floor slab	0.2	2.9	13	Storey 4
Floor to ceiling	2.7			
Ceiling space & floor slab	0.2	2.9	10.1	Storey 3
Floor to ceiling	2.7			
Ceiling space & floor slab	0.2	2.9	7.2	Storey 2
Floor to ceiling	2.7			
Ceiling space & floor slab	1	4.5	3.5	Grd/Storey 1
Floor to ceiling	3.5			

15.9 Metres Minimum Height

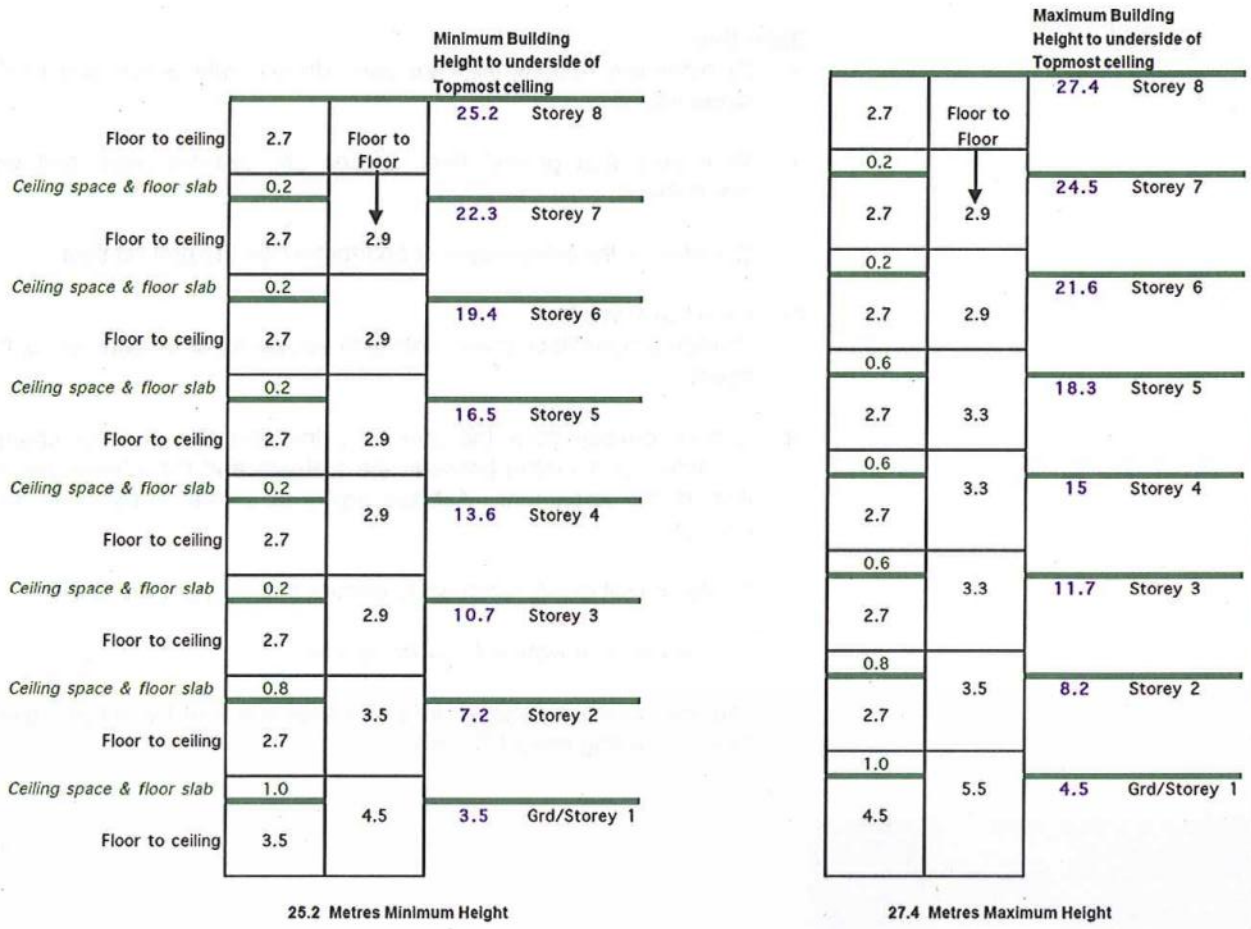
		Maximum Building Height to underside of Topmost ceiling	
		17.1	Storey 5
2.7	Floor to Floor		
0.6	3.3	13.8	Storey 4
2.7			
0.6	3.3	10.5	Storey 3
2.7			
0.6	3.3	7.2	Storey 2
2.7			
1	4.5	3.5	Grd/Storey 1
3.5			

17.1 Metres Maximum Height

4.7 Buildings - Interior

4.7.6 Floor to Ceiling Heights (cont'd)

TABLE 2: ANZAC PARADE, DONCASTER AVE & MEWS STYLE DEVELOPMENT



iii. Ensure that no storey has a greater floor to ceiling/floor to floor height than the storey below.

iv. Council may consider an increase in the maximum Floor to Ceiling height of residential storeys, provided that:
- the increase is offset by a corresponding decrease in ceiling space and slab thickness, in order to ensure that the maximum height (as a relationship of height and storeys) is not exceeded; and
- the resulting Built Form still reflects the proportions of the Building Envelopes specified in the Block by Block Controls i.e. 3:5, 4:6. 5:8.

4.7 Buildings - Interior

4.7.7 Garden or Ground Floor Apartments

Garden or Ground Floor Apartments can fulfil lifestyle choices, for example by providing families with direct access to communal open space from private open spaces, as well as being able to easily provide direct access to the street for those whose physical condition requires this.

Objectives

- To maximise opportunities for safe streets, with active and useful street edges.
- To ensure that ground floor spaces are useable, safe and well maintained.
- To optimise the advantages of apartments on the ground floor.

Performance Criteria

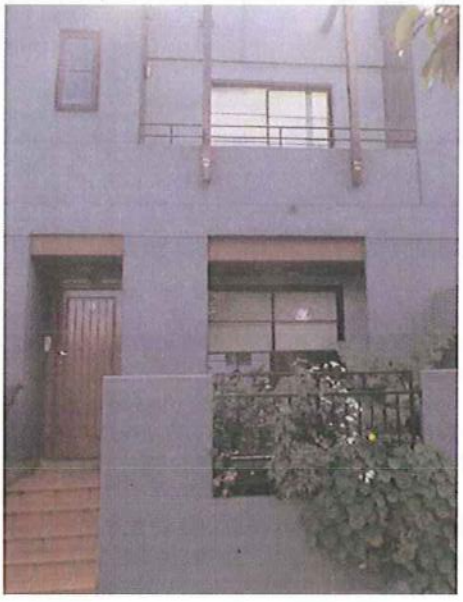
i. Provide ground floor apartments with access to, or an address to, the street.

ii. Ensure privacy from the street by incorporating a level change (minimum of 1 metre) between the footpath and the internal ground floor of the apartment. Achieve equity of access despite the level change.

iii. Design street facing windows to ensure privacy from the street.

iv. Clearly define private and public spaces.

v. Provide maximum flexibility for future alternate uses by complying with Floor to Ceiling Height Controls.



4.7 Buildings - Interior

4.7.8 Home Offices

According to the Australian Bureau of Statistics, in June 2000 almost one million Australians worked all or most of their hours at home, or had an arrangement with their employer to work at home. Almost half (49%) of all persons employed at home were female. Some 76% were 35 years of age and over, and 38% of persons employed at home were self-employed. For males employed at home the most common occupation groups were managers and administrators (35%) and professionals (28%), while females were most likely to be employed at home as professionals (23%), and advanced clerical and service workers (21%).

People working from home can contribute to the economy and life of the Town Centre. They can generate demand for business supplies and services, lunches, and pleasant places to meet colleagues or clients. They can contribute to safety initiatives by providing casual surveillance during the day, when other residents are working away from home.

Small home offices and workplaces forming part of a residential apartment, are encouraged.

Objectives

- To contribute to the economic growth of the Town Centre and achieve a diverse local workforce.
- To achieve an active and lively Town Centre by promoting 24 hour use.
- To promote less frequent use of motor vehicles.
- To improve personal and property security by maximising casual surveillance of the street.
- To provide opportunities for less mobile people to make economic progress.

Performance Criteria

i. Design home office areas to minimise conflict with domestic activities.

ii. Clearly identify the home office area, ideally by designing it so that it can be closed off from the rest of the apartment.

iii. Give special consideration to home office needs including storage, additional telephone and electrical capacity, and task lighting.

iv. Note that activities undertaken in home offices should not impact negatively on other residents in terms of noise, odour, traffic generation, appearance or other amenity.

4.7 Buildings - Interior

4.7.9 Stairs, Lifts and Corridors

Common circulation spaces within a building set the tone for residential amenity. Well designed circulation spaces such as stairs, lifts and corridors can make the difference between a building which feels like a permanent 'home' and a building which feels institutional.

The narrow buildings envisaged for the Town Centre should result in multiple circulation points, if dual aspect, cross-ventilated apartments are to be achieved.

Objectives
To provide adequate, safe and pleasant circulation spaces in which people can easily circulate.

Performance Criteria

i. Maximise the amenity of circulation spaces by providing generous spaces e.g. high ceilings, wide corridors.

ii. Provide at least one lift to service no more than forty (40) apartments over the full rise of the building.

iii. Optimise security by grouping apartments to a maximum of ten (10) around a common lobby. Council may consider a variation in the maximum number of units per floor where the applicant can demonstrate that a high level of amenity of the common lobby, corridors and units is achieved.

iv. Provide natural daylight to circulation spaces wherever possible.

v. Use attractive materials with robust finishes.

vi. Optimise the number of vertical circulation points and minimise the number of apartments per corridor.

vii. Ensure that no apartment is more than 12 metres away from a lift.

viii. Ensure that corridors are wide enough to allow two people walking in opposite directions, each carrying luggage or shopping parcels, to comfortably pass each other without disturbance.

ix. Consider separate open stairs and or lifts to 2nd storey commercial spaces.

4.7 Buildings - Interior

4.7.10 Storage

High quality living spaces should include adequate space to store the types of items which contribute to people's enjoyment of life.

Objectives

To provide storage for everyday household items within easy access of the apartment, including storage for sporting, leisure, fitness and hobby equipment.

Performance Criteria

i. Provide accessible and adequate storage facilities at the following rates per apartment:
   - Studio apartments- 6 cubic metres
   - 1 Bedroom apartments- 8 cubic metres
   - 2 Bedroom apartments- 10 cubic metres
   - 3+ Bedroom apartments- 12 cubic metres

ii. Provide at least 50% of this storage facility within the apartment, accessible from either a hall or a living space. The remaining 50% may be provided in a secured area remote from the apartment.

4.8 ESD

4.8.1 Clothes Drying

The use of energy efficient appliances is not only good for the environment but can also contribute to household savings. Using natural alternatives wherever possible, such as sun and wind drying for clothes is the recommended option for the environment.

Objectives
To maximise opportunities for the use of sun and wind for drying clothes.

Performance Criteria

i. Wherever possible, provide external clothes drying areas for all apartments. However, balconies are not to be considered as preferred locations.

ii. Position external clothes drying areas so they do not detract from the visual amenity of the building.

iii. Provide electrical clothes dryers to a minimum 3.5 star SEDA Greenhouse Score, as detailed in the table below.

Energy Rating (Star)	SEDA Greenhouse Score
4.5	6.0
4.0	5.5
3.5	5.0
3.0	4.5
2.5	4.0
2.0	3.5 *minimum*

iv. Ventilate electrical clothes dryers direct to the outside, wherever possible. Ensure that external vents are not visible from the street.

4.8.2 Energy Efficiency

According to the Sustainable Energy Development Authority of NSW, households use a third of NSW's electricity, costing residents over $1.6 billion each year. Over 90% of NSW's electricity is made by burning coal, which releases harmful greenhouse gases into the atmosphere. The average household spends up to $1500 annually on energy bills, emitting twice as much greenhouse gas as the average family car. Scientists believe that rising greenhouse gas levels cause global warming.

Early consideration of energy efficiency can result in a building that consumes minimum energy during its life, leading to environmental benefits and cost savings for residents.

Objectives

- To ensure that energy efficiency and energy generation are fundamental parts of the design process of any building.
- To eliminate/reduce the need for mechanical heating/cooling of the building.
- To minimise greenhouse gas generation.
- To maximise the thermal performance of the building.

4.8.2 Energy Efficiency (cont'd)

Performance Criteria

i. Design the building to ameliorate the temperature from the outside to the inside in order to reduce energy consumption.

ii. Consider the use of Building-Integrated Photovoltaics as a building material.

iii. Orientate the building to maximise solar gain in winter and to minimise solar gain in summer.

iv. Provide south facing apartments with alternative orientation to ensure solar access.

v. Use energy efficient materials with adequate insulation properties.

vi. Comply with a minimum 3.5 star House Energy Rating (using NatHERS or equivalent) for the building envelope of each new apartment.

vii. Provide a minimum 3.5 star SEDA Greenhouse Score water heater in each new apartment. The following table presents information to assist applicants select an appropriate heater.

Water Heater Type		SEDA Greenhouse Score
Solar - Gas Boost *	Storage	5
Solar - Electric Boost*	OP2	4
Electric - Storage	Heat Pump	4
Gas	Instantaneous	4
Gas - Storage	High Efficiency	4
Gas - Storage	Low Efficiency	4
Electric	Instantaneous	2
Electric	Continuous	1
Electric - Storage	Storage (OP1, OP2)	1

** greater than 50% solar contribution*

viii. Where possible provide solar hot water heaters integrated into the design of each new development.

ix. Group wet areas, such as bathrooms, kitchens and laundries, to maximise hot water system efficiencies and minimise pipe runs.

x. Insulate all walls, ceilings, roofs and hot water pipes.

To easily find an accredited Assessor who can generate a NatHERS assessment, contact:

House Energy Rating Management Body
P: 02 9385 5593
F: 02 9385 4507
hmb@unsw.edu.au
www.hmb.net.au

4.8.3 Lighting Efficiency

According to SEDA, Australia's six million homes are responsible for the production of more than 40 million tonnes of harmful greenhouse gases every year - that's 25% of the total amount of greenhouse gas produced due to the use of electricity and gas. Reduced domestic energy use will have a significant impact on greenhouse gas emissions.

Designs which enable the penetration of direct or indirect light from the sun into interior spaces reduce energy consumption and dependency. Energy efficient lighting is just one of a range of 'Energy Smart' strategies which reduce average household bills and help protect the environment.

Objectives

- To provide adequate lighting to meet the intended function and purpose of the space.
- To minimise the use of artificial lighting during daylight hours.
- To maximise use of natural light and minimise energy consumption.
- To avoid wastage of energy.

Performance Criteria

i. Design buildings to maximise available natural light without creating major heat gain pathways, e.g. by introducing façade protrusions or inversions to maximise daylighting.

ii. Optimise the number of north facing windows.

iii. Incorporate appropriately designed double glazed or energy efficient glass/skylights (e.g. double glazed with solar blind) clerestory windows, and summer shading to improve daylight levels in the buildings.

iv. Incorporate light shelves (horizontal surfaces placed on the face of the building so as to reflect light into apartment ceilings) in deep apartments.

v. Use light coloured walls and ceilings in spaces where more light is required.

vi. Design landscaping elements to maximise daylighting.

vii. Use light fittings with high energy efficiency.

viii. Use motion detectors to externally light doorways and entrances, unless their use conflicts with Safety and Security objectives.

ix. Refer to SEDA's Energy Smart Homes Policy for design advice about energy efficiency, including the use of energy efficient light fittings, the location of light switches, and purpose lighting of rooms.

4.8.4 Natural Ventilation

Natural ventilation, the unimpeded flow of air through a building or apartment, is a vital contributor to residential amenity and a high quality living environment. The slim Building Footprints required by this Plan are specifically to encourage development which relies as much as possible on natural ventilation.

Objectives
To ensure that all habitable rooms have sufficient airflow through them.

Performance Criteria

i. Ensure that all apartments are single loaded or dual aspect, to allow the direct flow of air from one side of the apartment to the other.

ii. Consider the use of crossover apartments, which minimise corridors and lift lobbies but provide a dual aspect for natural ventilation.

iii. Provide more than one openable window to each habitable room.

iv. Select and design windows which can be reconfigured to catch prevailing breezes, and funnel breezes into the apartments.

v. Explore innovative technologies to enable natural ventilation of internal rooms such as bathrooms and laundries.

vi. Use design solutions such as: higher level casement or sash windows; and clerestory windows or operable fanlight windows - including above internal doors - to facilitate convective currents.

vii. Consider acoustic transfer grilles with operable shutters through external and internal walls.

viii. Ensure that all habitable rooms meet the requirements of natural ventilation in the BCA.

ix. Council may consider some double-loaded apartments only if specific site conditions create design difficulties and the applicant can provide appropriate verification/evidence (prepared by a suitably qualified professional) that proven innovative technologies will be employed to achieve natural ventilation.

4.8.5 Site Servicing And Waste Management

According to the NSW Wasteboard, the state is running out of landfill space. Raw material costs, production costs, and tip charges will continue to rise while we continue to waste our resources. Growing public concern will drive us all to participate in minimising our wastes.

Objectives

- To encourage waste minimisation including source separation, reuse and recycling.
- To ensure efficient storage and collection of waste and quality design of facilities.
- Minimise the impact of service access on pedestrians and the retail frontage.

Performance Criteria

i. Incorporate all stages of waste management into new development.

ii. Integrate waste management (including all stages of waste storage and handling) into the design stage of the project.

iii. Design waste management so that residents find it convenient to use.

iv. Provide, for each apartment, a waste cupboard or temporary storage area of sufficient size to hold a single day's waste and enable source separation.

v. Provide the ability for residents to sort waste into: organic waste; glass; paper; plastic; and aluminium by providing appropriate receptacles and standard recycling signage as recommended by the NSW Waste Board.

vi. Incorporate on-site composting wherever possible, either as self-contained composting units on balconies or as part of the shared site facilities.

vii. Encourage commercial and retail uses to integrate waste management by providing the ability to sort waste, and by encouraging on-site composting.

viii. Screen all service areas from adjoining properties.

ix. Submit a Waste Management Plan that conforms with *Randwick City Council's Waste Management Plan - Part A* with each Development Application. Generally the Waste Management Plan should conform guidelines published in the document *Better Practice Guide for Waste Management in Multi-Unit Dwellings* - Resource NSW - Feb 2002

x. Provide adequate space within new development for the unloading and loading of service vehicles.

4.8.6 Space Heating and Cooling

The best combination of building orientation, wall and ceiling insulation, efficient heating, cooling, hot water, lighting and appliances can reduce household energy consumption by up to 40%.

Objectives

To reduce or eliminate reliance on mechanical heating and cooling, both in summer and in winter.

Performance Criteria

i. Use passive solar design techniques to reduce the necessity for mechanical heating and cooling.

ii. Design apartments so that individual rooms can be closed off, and therefore heated or cooled individually.

iii. Design heating/cooling systems to target only those spaces that need heating or cooling and ensure efficient distribution/redistribution of warm/cool air.

iv. Provide front doors with security screen doors.

v. Provide doors and windows with draught excluders and weather seals.

vi. Consider the use of ceiling fans to provide an alternative to mechanical cooling.

vii. Consider the use of external awnings and blinds to keep out summer heat.

viii. Refer to SEDA's Energy Smart Information Centre (1300 138 638 or (02) 8303 0565) for further design advice.

4.8 ESD

4.8.7 Storm Water Management

The Kensington Town Centre is entirely underlain by the Botany Sand Beds of the Botany Basin. The water table is particularly shallow and groundwater levels are also very responsive to seasonal conditions, fluctuating up to about 1 metre from a period of dry conditions to a period of wet weather.

Objectives

- To control the quality and quantity of storm water.
- To reduce impacts on adjoining properties.
- To protect surface water and groundwater resources.

Performance Criteria

i. Minimise runoff by the reuse and recycling of storm water for irrigation purposes.

ii. Provide soft landscape planting beds to assist in the recharge of the existing ground water.

iii. Provide on site detention of water to mitigate flow into the existing stormwater system and/or into the existing water table and prior to any release it meets appropriate water quality standards.

iv. Use permeable paving to assist the recharge of the existing ground water.

v. Minimise impervious areas by using pervious or 'open' pavement materials and by draining forecourts, driveways etc to infiltration zones or biofiltration trenches. Any in-situ treatment should appropriately treat the stormwater runoff to protect and prevent contaminants from entering the groundwater system.

vi. Set building floor levels with freeboard of at least 300mm above the 1 in 100 year flood level (subject to flood investigations, to be submitted with Development Applications). Council may consider alternative solutions which assist to ensure good day to day access of those with a disability. For example, appropriate technical advice and expertise may be able to recommend technological solutions such as automatic flood barriers appropriate for individual site conditions and development parameters.

vii. Ensure that all development accords with the NSW Government's Flood Policy as explained in the Government Floodplain Management Manual (2001) and consideration has been given to:
   - the full range of flood events up to and including Probable Maximum Flood the potential impacts of flooding on the proposed development;
   - the impact of the proposed development on flood behaviour upstream and downstream of the site;
   - the possibility of impacts of flooding on other residents and other users of the floodplain; and
   - the availability of safe access and egress from the site in times of flood, and the potential risk to SES members should evacuation be necessary.

4.8.7 Storm Water Management (cont'd)

viii. Maintain existing overland flow paths.

ix. Use gravity drainage connections to storm water system.

x. Submit a storm water drainage concept plan and flood investigation with each Development Application.

xi. Note that approval from the Department of Land and Water Conservation may be required for Development Applications involving use or extraction of ground water. *(See page 86)*

4.8.8 Water Conservation

Water conservation can result in household savings as well as making a practical environmental contribution.

Objectives
To minimise water consumption.

Performance Criteria

i. Provide AAA rated showerheads and faucets.

ii. Provide dual flush toilets.

iii. Use a diversity of local native plant species in all landscaped areas to assist reduce water consumption.

iv. Use drip irrigation in all landscape areas.

v. Use recycled water and roof surface runoff water for irrigation.

vi. Consider the use of rainwater tanks.

4.9 Open Space

4.9.1 Communal Open Space

Communal open spaces are those spaces within the site that are accessible to and benefit all residents and users.

Objectives

- To ensure that every development of more than 2 apartments has access to an area of communal open space of sufficient size and quality to enhance the development's livability.
- To provide residents with passive and active recreational opportunities.
- To provide an area on site that enables soft landscaping and deep soil planting.
- To enable the longer term creation of combined communal open space.

Performance Criteria

i. Maximise ground level communal open space.

ii. Locate communal open spaces so they form a focus of the development and provide a landscape buffer between buildings.

iii. Avoid fragmenting communal open space into multiple spaces.

iv. Design communal open spaces as spaces which provide a pleasant outlook for residents.

v. Ensure that communal open spaces facilitate solar access to apartments, whilst providing visual privacy between them.

vi. Reduce glare through the careful design of hard surfaces and landscaping.

Well landscaped communal open spaces can provide pleasant outlooks from commercial areas as well as from residences.

4.9 Open Space

4.9.2 Landscape Treatment

Landscaping has the potential to contribute to the character and visual quality of the Town Centre. Increasing the extent of planting bed and the area of unpaved surface will help to integrate new development into its surrounds.

Objectives

- To add value to quality of life in new developments by assisting and improving privacy, outlook and views.
- To reduce stormwater quantity and improve its quality.
- To improve the micro-climate and solar performance within new development.
- To improve urban air quality.
- To provide shade from the elements.
- To enable the longer term creation of combined communal open space.

Performance Criteria

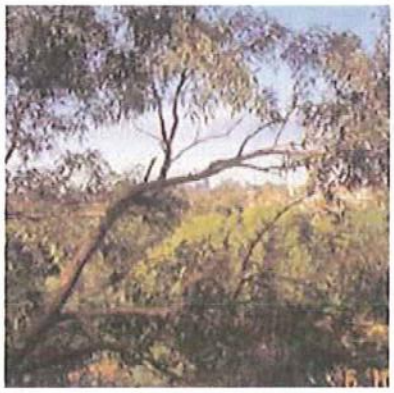
i. Retain existing, and incorporate new, indigenous trees, shrubs and ground covers where appropriate/possible.

ii. At property boundaries, substitute soft landscape treatment for fencing. Ensure that planting is advanced, to provide visual privacy where necessary.

iii. Use plant material and pavements that integrate the development with the adjoining area and are consistent with the Kensington Town Centre Public Domain Improvement Strategy.

iv. Maximise deep soil zones to provide for substantial landscaping.

v. Use landscape design to improve the energy and solar efficiency of apartments and the microclimate of private open spaces. Use mechanisms such as:
   - Tall cylindrical-shaped trees in row planting to shade low-angle sun on the eastern and western sides of apartments;
   - Trees that do not cast shadows over solar collectors at any time of the year;
   - Deciduous trees to shade windows & open space areas in summer; and
   - Evergreens placed well away from buildings so they do not block the winter sun.

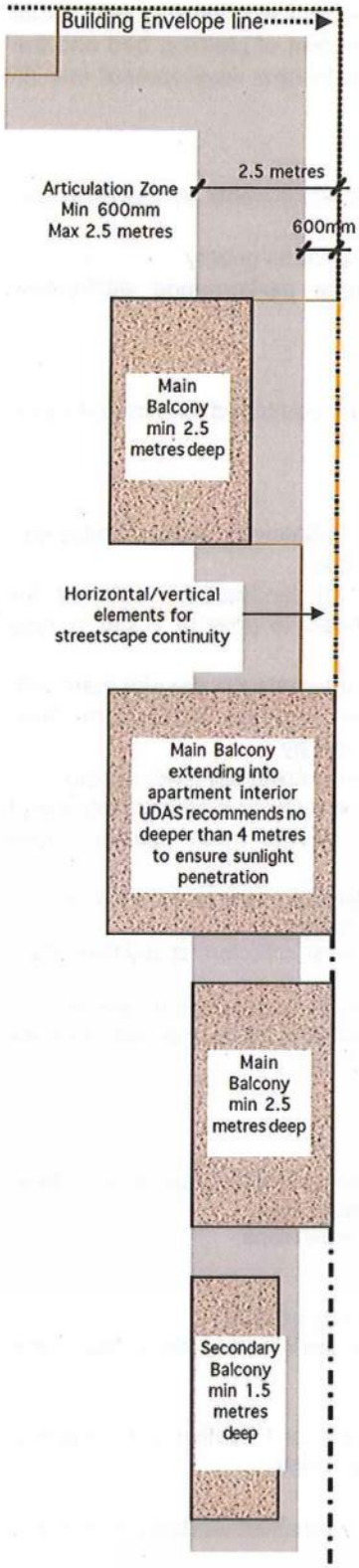


vi. Ensure that vegetation:
   - Is in scale with the development;
   - Comprises a diversity of local native plant species to improve native fauna habitat and assist to reduce water consumption;
   - Relates to the street planting and the streetscape;
   - Relates to the building form;
   - Is robust and easily maintained;
   - Creates private gardens to ground floor apartments;
   - Facilitates stormwater infiltration by the use of permeable surfaces; and
   - Reduces overland flow.

vii. Consider gardens on rooftop Communal or Private Open Space to assist improve insulation and minimise runoff.

viii. Submit a landscape plan prepared by a qualified landscape architect.

4.9 Open Space



4.9.3 Private Open Space

Private outdoor open spaces include areas of paving or planting either at ground level or above. Roof gardens over built structures, terraces, balconies and roof terraces are all considered as private outdoor open space, providing they are connected to an apartment. Whether they are enclosed, recessed within walls or roofs, projecting without or outside roofs, walls or columns, or partially recessed/partially projecting, private open spaces will generally be situated within the Articulation Zone, although some may penetrate it.

Objectives:

- To ensure that every apartment has access to a private, useable and functional open space directly off main internal living spaces.
- To contribute to the articulation buildings.

Performance Criteria

Unless otherwise indicated on the Block by Block Controls:

i. Whether at ground or above, provide at least one balcony/terrace for each apartment, directly accessible from the main living area (the main balcony).

ii. Ensure that the main balcony extends the living space by being sufficiently well proportioned to accommodate a dining table and chairs, with additional space for flower boxes or potted plants.

iii. Ensure that the main balcony has a minimum depth of 2.5 metres, & a minimum area of:
- 6 sq metres for a Studio/One Bedroom apartment
- 10 sq metres for a Two/Three Bedroom apartment
- 15 sq metres for a Four/more Bedroom apartment

iv. Assist visual privacy by recessing and/or partially enclosing the main balcony.

v. Ensure that additional balconies have a minimum depth of 1.5 metres and a minimum width of 2.1 metres.

vi. Juliet balconies are appropriate for the rear of Contributory Buildings They may be considered in lieu of additional balconies for Mews Style Development, and in lieu of some additional balconies for other development.

vii. Orientate balconies to maximise solar access. Ensure that the longer dimension of any balcony is outward facing to maximise light penetration into the interior of each apartment.

viii. Ensure that the undersides of balconies are well designed and provide a pleasing appearance from the street.

ix. Take advantage of views and any natural features, and improve community safety by allowing surveillance over the street and other public areas, but minimise the overlooking of adjoining apartments.

x. Include sunscreens, pergolas, shutters, and operable walls to enhance design and livability, e.g. to reduce road noise impacts.

xi. Ensure that balconies are not designed for building maintenance purposes only, nor designed so deep that they stop sunlight entering the lower apartments in the building.

4.10 Safety & Security

Safer by Design

It is an accepted Crime Prevention principle that physical environments can be designed to positively influence human behaviour. The NSW Police Service provides 'Safer by Design' training and advice, based on the strategies of Crime Prevention Through Environmental Design (CPTED).

Territoriality: People protect their own territory. Fences, pavement treatments, art, signs, good maintenance, and landscaping are some physical ways to define ownership. Identifying intruders is much easier in a well-defined space.

Natural Surveillance: Criminals don't want to be seen. Landscaping and lighting can be planned to avoid 'hiding places' and enable residents, neighbours and people passing by to see who is entering or leaving a building.

Activity Support: Encouraging legitimate activity in public spaces helps discourage crime. Any activity that gets people out and interacting - shopping, eating, sitting in a public space, - helps prevent crime.

Access Control: Properly located entrances, exits, fencing, landscaping, and lighting can direct both foot and automobile traffic in ways that discourage crime.

A well maintained property contributes to community safety by signalling that it is a 'territory' which its owners and inhabitants are willing to protect.

Objectives

- To ensure that the development, and the precinct as a whole, is safe and secure for residents and visitors.
- To encourage transparency - the ability to clearly see what is happening on the street and in the areas between the street and the building.
- To maximise casual surveillance - the ability to overlook the street and footpath from windows or balconies.
- To ensure that the building and the site can be cleaned and easily maintained.

Performance Criteria

i. Design buildings to clearly define the progression from public through to private space.

ii. Encourage ground level apartments to enter directly from the street rather than through a common foyer.

iii. Orientate entrances towards the public street and ensure visibility between entrances, foyers and the street.

iv. Provide direct and well-lit access between carparks and apartments, between carparks and lift lobbies, and to all apartment entrances.

4.10 Safety & Security

Safer by Design (cont'd)

v. Consider providing separate access for residents in mixed use buildings.

vi. Provide views over communal and public open space.

vii. Provide views of common internal areas, including lobbies and foyers, hallways, recreation areas and carparks, wherever relevant.

viii. Design out blind or dark alcoves which might conceal intruders, especially in areas near lifts, stairwells, and entries and within carparks.

ix. Provide clear lines of sight and well-lit routes throughout the development.

x. Provide appropriate levels of illumination for all common areas.

xi. Illuminate carpark entrances to levels higher than the minimum acceptable standard.

xii. Consider audio and video intercom and/or key card access systems.

xiii. Use materials and design detailing that ensure long life and ease of maintenance.

xiv. Design windows that can be cleaned from inside the building.

xv. Manually operated (rather than mechanical) systems such as blinds, sun shades, pergolas and curtains will be highly regarded.

xvi. Where mechanical systems are suggested, ensure they have manual backup systems.

xvii. Submit a formal Crime Risk Assessment with every Development Application comprising 20 or more new apartments. (for more information contact NSW Police Service Safer by Design Team or go to www.police.nsw.gov.au)

Development Application Checklist

Pre-Lodgment
Applicants are encouraged to discuss their proposals with Council prior to lodging the DA, to enable potential constraints and opportunities to be identified at an early stage.

Lodging the DA
Check that the following documents are included with the DA:

- Site Analysis - written statement together with appropriate survey drawings/images *(refer page 15)*
- Model, montage or perspective *(refer page 15)*
- Summary of Uses and Areas *(refer page 17)*
- Statement of Conservation Works - Contributory Buildings *(refer page 23)*
- Agreement to Lease - Neighbourhood Supermarket Shopping Centre or Specialist Concept Retailer *(refer pages 25 and 26)*
- Heritage Impact Assessment - Doncaster Hotel, Doncaster Plaza site *(refer pages 49 & 52)*
- Evidence of adjoining property owners' agreement to the Right of Carriageway, or evidence that an action has commenced in the Supreme Court, or evidence that car access forms part of the Common Property of a Strata Titles or Community Titles scheme *(refer page 84)*
- Department of Land & Water Conservation requirements *(refer page 86)*
- Traffic & Parking Analysis *(refer page 88)*
- Shadow Diagrams *(refer page 101)*
- Noise and Vibration Impact Assessment *(refer page 104)*
- Operational Management Plan - Student Accommodation *(refer page 107)*
- Furniture Layout Scale Drawings *(refer page 108)*
- Economic Assessment of the impact of any retail proposed for land zoned Residential 2C on existing retail in the Town Centre.
- Verification/Evidence/Examples of any innovative technologies proposed as alternatives for natural ventilation, stormwater management *(refer pages 119 and 122)*
- Model AND Montage AND Perspectives AND CAD files for any proposals involving habitable roof space *(refer page 100)*
- Waste Management Plan *(refer page 120)*
- Stormwater Drainage Concept Plan and flood investigation *(refer page 122)*
- Landscape Plan *(refer page 125)*
- Crime Risk Assessment *(refer page 128)*

Note that these documents must be prepared by suitably qualified professionals, as described in this Plan.

Definitions

Acoustic Privacy refers to the measure of sound between dwellings, and between external and internal spaces.

Articulation Zone refers to the area in which architectural movement and modulation should vary the notional Building Envelope.

Apartment (synonymous with 'dwelling' as defined in Randwick City Council's LEP 1998) means a room or number of rooms occupied or used or so constructed or adapted as to be capable of being occupied or used as a separate residence.

Block refers to a group of subdivided lots, the edge of which is bound by public roads,and in some cases, public roads and public open space.

Building Envelope means a three dimensional shape within which a development must fit. It defines the limits for the siting and height of any buildings.

Building Height is calculated as the height measured vertically from ground level to the underside of the ceiling of the topmost floor.

Building Footprint means the area of land measured at finished ground level that is enclosed by the external walls of a building.

Building Zone refers to the base of the Building Envelope.

Communal Open Space (synonymous with 'Landscaped Areas' Randwick City Council LEP 1998) defining useable shared open space for the recreation and relaxation of all residents of a development.

Defined Parcel means a collection of allotments outlined in red on the Block by Block Controls, for which specific Design and Development controls apply, including in some instances minimum or maximum site amalgamations required for development to occur.

Environmentally Sustainable Development is development that uses, conserves and enhances the community's resources so that ecological processes are maintained and the total quality of life, now and in the future, can be increased.

The Golden Section or Golden Mean (1: 1.618) is a ratio that is present in the growth patterns of many things - e.g. the spiral formed by a shell or the curve of a fern. Architects and artists have used the Golden Section for centuries, to determine pleasing proportions.

Gross Floor Area means the sum of the areas of each level of a building where the area of each level is taken to be the area within the outer face of the external enclosing walls, excluding:

- columns, fins, walls, shading devices, awnings, balconies and any other elements, projections or works outside the general lines of the outer face of the external wall; *and*
- lift towers, cooling towers, machinery and plant rooms, air-conditioning ducts; *and*
- associated car parking and any internal vehicular or pedestrian access to that parking, *and*
- space for the loading and unloading of goods.

Definitions

Ground Level is calculated as an average of levels across the allotment frontage.

Habitable room or space means a room used for normal domestic activities, and includes:

- a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room and sunroom but excludes:
- a bathroom, water closet, pantry, walkin wardrobe, corridor, hallway, lobby, photographic darkroom, clothes drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods.

Impervious surface is material that does not allow water to pass through to the soil below.

Juliet balcony means a small projecting balcony, generally ornamental or only large enough for one person standing.

Living area means a room used for normal domestic activities excluding non-habitable rooms and bedrooms.

Lot or allotment refers to an individual parcel of sub-divided land.

Private Open Space means an area of land or of a building suitable for the private outdoor living activities of the occupants of one apartment, and directly accessible from a living area of that apartment.

Public Open Space means land used, or intended for use, for recreational purposes by the public.

Roof terrace means a space, open to the sky, created on the roof of a lower level portion of the building. Roof terraces may be designed as Private Open Space or as Communal Open Space.

SEPP means State Environmental Planning Policy.

Setback means a defined physical distance between the Envelope edge and: certain boundaries; certain buildings; and certain rooms in adjacent buildings.

Storey means a floor within a building, but not including:

- a roof or part of a roof, used as an uncovered garden, terrace or deck;
- useable or habitable roof space; or
- semi-basement or basement parking.

Semi-basement parking refers to a car parking area partially accommodated underground. The roof to this space (top of the slab) must not be greater than 1.5 m above ground level.

Useful Reference Materials

Crime Prevention Through Environmental Design
Crime Prevention and the Assessment of Development Applications, Performance Criteria under Section 79C of the Environmental Planning Assessment Act, 1979
Planning NSW (formerly Department of Urban Affairs & Planning).

Heritage Conservation
The Australia ICOMOS Burra Charter,www.icomos.org
Randwick Heritage Study, Randwick City Council
Centennial Parklands Conservation Management Plan

Demography
Census 2001 data for Kensington Postal Area.
Australian Bureau of Statistics

Energy Efficiency
Energy Smart Homes Policy
Sustainable Energy Development Authority (SEDA).

Floodplain Management
NSW Government Floodplain Management Manual (2001)
NSW Government Bookshop

Return on Investment
The Design Dividend, research paper
Property Council of Australia
www.propertyoz.com.au

Student Housing
Demand and Type: Kensington Campus Masterplan 2002
University of New South Wales.

Transport and Access
Integrating Land Use and Transport, Improving Transport Choice: Guidelines for Planning and Development
Planning NSW, Roads and Traffic Authority & Transport NSW

Centennial Parklands Transport Access and Parking Plan

Urban Housing Design
Better Urban Living - Performance Criteria for Urban Housing in NSW,
Planning NSW.

Residential Flat Design Pattern Book
Urban Design Advisory Service and NSW Government Architect.
www.patternbook.nsw.gov.au

Residential Flat Design Code
Planning NSW Urban Design Advisory Service www.planning.nsw.gov.au

Waste Management:
Waste Planning in Multi-Unit Dwellings - Best Practice Design Performance Criteria, *Inner Sydney Waste Board.*

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Randwick City Council

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Acting Manager, Strategic Planning, Randwick City Council

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Joseph Rega (Architect)
Regalia

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Corrs Chambers Westgarth

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Stephen Harris (UNSW School of Planning)

Dr Stephen Gatt (Precinct Committee representative)

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