PART 9

NON-RESIDENTIAL AND OFFICE BUILDINGS

NON-RESIDENTIAL AND OFFICE BUILDINGS

INTRODUCTION

This Part is to be read in conjunction with KLEP. This section applies to all non-residential and office building developments within the B1, B2, B4 and B7 zones.

Where a development involves refurbishment works or alterations/ additions to existing buildings, new elements are to meet the requirements of this Part.

The objectives and controls in this Part guide the development of office buildings in meeting the aims and objectives within the LEP.

9A Site Design

9A.1 Building Setbacks

9A.2 Building Separation

9A.3 Deep Soil Landscaping

READ WITH
SECTION A **PART 8 -** Mixed Use Development 8A.4: Building Separation
SECTION B **PART 14 -** Urban Precinct and Sites
SECTION C **PART 21 -** General Site Design

9A.1 BUILDING SETBACKS

Further controls that may apply		
SECTION A **PART 8A.3 -** Building Setbacks	**SECTION B** **PART 14 -** Urban Precinct And Sites	

Objectives

1 *To create cohesive streetscapes with consistent building alignments and setbacks.*

2 *To facilitate building modulation and articulation of facades.*

3 *To ensure adequate areas to enable effective street tree planting and setback landscaping where appropriate.*

4 *To protect the privacy and amenity of any adjoining residential land uses.*

5 *To ensure adequate separation between buildings on different sites for sun access, acoustic control and natural ventilation.*

Controls

1 Buildings are to conform with established street and boundary setback pattern and distance and comply with relevant setback controls in Part 14 and Part 8A.1

2 The following elements may encroach into setback areas within B4 zones:

i) eaves;

ii) pergolas; and

iii) blades, fins, columns.

3 Basements are not to encroach into the street, side or rear setbacks.

4 Surface parking is not permitted within the street setback.

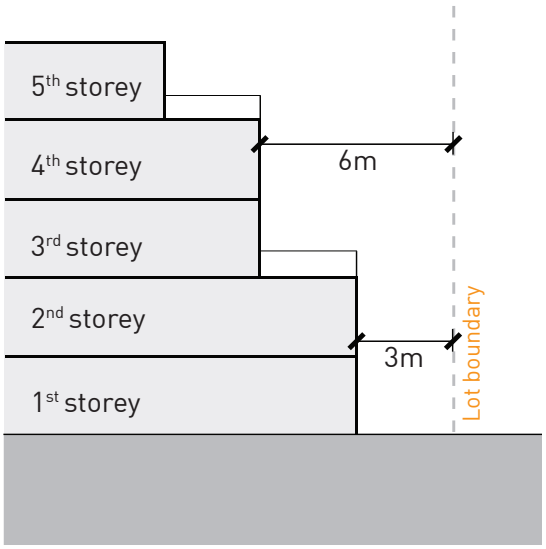


Figure 9A.1-1:
Minimum side and rear setback controls.

9A.2 BUILDING SEPARATION

Further controls that may apply		
SECTION A **PART 8A.4 -** Building Separation	**SECTION B** **PART 14 -** Urban Precinct And Sites	

Objectives

1 *To ensure that new development supports the desired character of the area with appropriate massing and spaces between buildings.*

2 *To ensure building configuration protects and enhances visual and acoustic privacy for occupants.*

3 *To provide building form and layout that minimises overshadowing of adjacent properties and open space.*

4 *To provide building configuration that facilitates the provision of useable communal open space, landscaping and view corridors.*

5 *To provide building form and layout that maximises view sharing.*

Controls

1 Buildings within B2, B4 and B7 zones are to comply with the relevant building separation controls in *Part 14 and Part 8A.2*.

2 Separation distances between building elements within a development and between adjoining properties are to be:

i) Three to five storeys:
- a minimum of 9m between commercial uses and habitable rooms or balconies of dwellings;
- a minimum of 6m between commercial uses and commercial uses or non-habitable rooms of dwellings

ii) Six storeys and above:
- 9m between commercial uses and commercial uses or non-habitable rooms of dwellings.

Nothing in this provision reduces the required setback in Part 9A.1.

3 Office developments adjacent to existing residential flat buildings built prior to 2004 or commercial buildings built prior to 2013 (ie prior to current setback requirements), are to demonstrate that the adjoining development retains adequate visual and acoustic privacy, access to daylight and views and that the massing of the building is appropriate to the character of the locality.

Figure 9A.2-1:
Landscaped open space as separation between office buildings.

9A.3 DEEP SOIL LANDSCAPING

Objectives

1 *To provide landscaping that is appropriate to the scale and context of the development.*

2 *To retain significant trees.*

3 *To minimise impervious surfaces that generate storm water runoff.*

4 *To soften the built form.*

5 *To provide amenity for the users of the site and its neighbours.*

6 *To provide shade for users of the site and for carparking.*

Controls

1 Where setbacks are required deep soil landscaping is to be provided to at least half the setback.

2 Natural ground level is to be retained throughout any required setbacks, where possible.

3 Deep soil landscaping is also to be provided along side setbacks.

4 Deep soil zones are to be configured to retain healthy and significant trees on the site and adjoining sites, where possible.

5 Where landscaping is provided along the street alignment, a physical edge such as a planter box wall, is to be no higher than 1m from the finished level of adjacent public pathways.

Figure 9A.3:
Mixed planting in side setback includes tall trees

9B Access and Parking

READ WITH

SECTION C
PART 22 - General Access and Parking
- 22.3: Basement Car Parking
- 22.4: Visitor Parking
- 22.5: Parking for People with a Disability
- 22.7: Bicycle Parking and Facilities
- 22R.2: Car Parking Rates

PART 23 - General Building and Sustainability
- 23.7: Waste Management

9B.1 SERVICE ACCESS AND LOADING FACILITIES

Further controls that may apply		
		SECTION C **PART 23.7 -** Waste Management

Objectives

1 *To provide adequate and accessible on-site service areas and loading facilities.*

2 *To provide size and number of service areas and loading docks in proportion to the scale and intensity of the proposed use.*

3 *To ensure that loading facilities do not detract from the street scape and the amenity of nearby public spaces and residential areas.*

Controls

Service access

1 On-site service vehicle access are to be provided and designed in accordance with the following:

i) a driveway is to be established that is of adequate strength, width and design for the intended service vehicle characteristics;

ii) the driveway is to be designed such that service vehicle movement is in a forward direction, both when entering and exiting the site;

iii) entrance heights are to allow access for service vehicles;

iv) service ducts, pipes and other overhead obstructions are to be located to maintain minimum finished ceiling heights required for service vehicle access; and

v) on-site manoeuvrability is to be unimpeded for all site users.

2 Generally, service vehicle access is to be combined with parking access. Separate access may be required in major office developments.

3 Where a waste and recycling room is provided within the basement, the minimum finished ceiling height is to be 4.5m along the path of travel from the street to the commercial waste collection and manoeuvring area. This clearance is to be kept free of any overhead ducts, services or other obstructions.

Loading facilities

4 Service vehicles turning into or out of a road or driveway are to be able to complete their turning manoeuvres without crossing the centre line of the public road.

5 On-site internal loading facilities is to be provided for all developments with loading and unloading requirements.

9B.1 SERVICE ACCESS AND LOADING FACILITIES (continued)

Controls

6 Loading docks are to be:

i) accessed via a rear lane or side street where these are available, and accessible to heavy vehicles;

ii) conveniently located in such a way that minimises conflict with pedestrians and other traffic; and

iii) screened from the public street.

Note: Refer to RTA Guidelines (RMS).

7 Gradients in service areas are to be kept to a minimum. The maximum gradient measured in any direction at any one point, is to be 1:6.5 (15.4%) where only forward movement is to take place or 1:8 (12.5%) where reverse manoeuvres will occur.

8 Circulation roadways and loading area dimensions are to comply with the provisions in *AS2890.2: Off-Street Parking (Part 2:Commercial Vehicle Facilities)*.

9 The design of the apron area in front of the loading dock(s) is to take into account the type of vehicle to be used. Reference is to be made to *AS2890.2* for apron dimensions.

10 Turning provisions are to be made within the site for the manoeuvring of vehicles using the loading and unloading facilities in accordance with Austroads Design Vehicular and Turning Templates.

Note: Refer to RTA guidelines (RMS)- *RTA Guide to Traffic Generating Developments* and relevant Australian Standards.

9B.2 CAR PARKING PROVISION

Further controls that may apply		
		SECTION C **PART 22.3 -** Basement Car Parking **PART 22.4 -** Visitor Parking **PART 22.5 -** Parking for People with a Disability **PART 22.8 -** Surface Parking **PART 22R.1 -** Car Parking Rates

Objectives

1 *To provide adequate car parking for the building's users and visitors, with consideration of building type and proximity to public transport.*

2 *To locate and design car parking which is integrated into the design of the site and the building.*

3 *To locate multi-level car parking in a way that protects streetscape address and visual amenity.*

4 *To limit surface car parking and ensure it is incorporated into the landscape design of the development site.*

5 *To ensure shading of outdoor car park areas through the use of landscaping.*

Controls

Car parking design

1 All car parking areas are to be provided within the basement of development.

2 Basement car parking areas are to be consolidated under building footprints.

Note: Basements may be permitted to extend under the space between buildings on the same site.

3 The basement car park is not to project more than 1m above existing ground level to the floor level of the storey immediately above. See *Figure 9B.2-1*

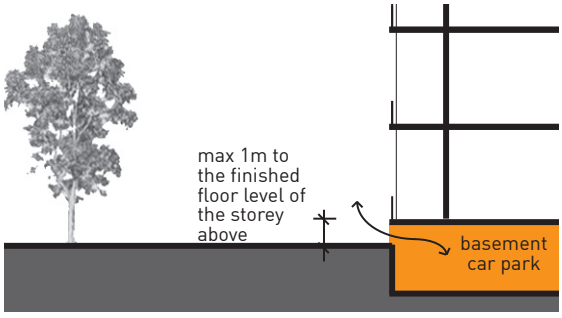


Figure 9B.2-1:
Controls for basement car park projection above existing ground level.

4 Car parking spaces, circulation areas, roadways and ramps are to comply with AS2890.1.

5 Multi-storey car parking above ground level may be permitted where it is housed within the building and concealed behind office or other active uses, so that the parking structure is not visible from the street or adjacent properties. Refer to *Figure 9B.2-1 and 9B.2-2.*

6 Multi-storey car parks are to have a minimum floor to ceiling height of 3.5m at ground or entry level, and 3m on any other above ground level, to enable flexibility for change in use. See *Figures 9B.2-2 and 9B.2-3*.

7 Any surface car parking is to comply with Part 22 of this DCP and requirements of AS2890.1.

9B.2 CAR PARKING PROVISION (continued)

Controls

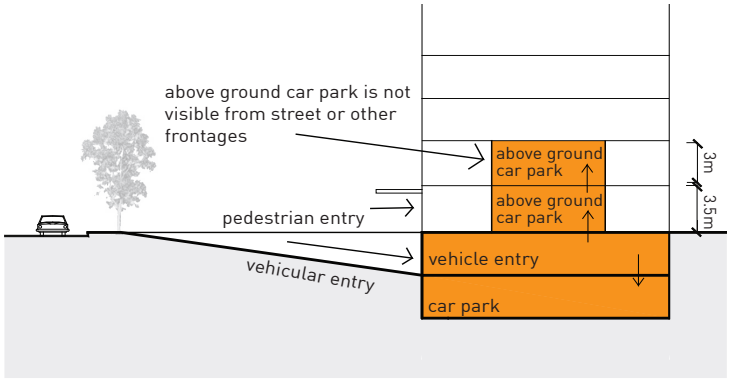


Figure 9B.2-2:
Multi-storey car park is housed within the building to facilitate active street frontages.

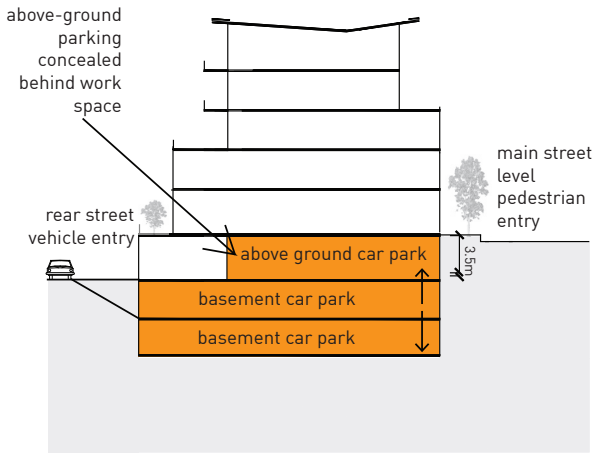


Figure 9B.2-3:
Above ground car parking is permitted on steep sites.

9B.2 CAR PARKING PROVISION (continued)

Controls

Car parking rates

8 For all non-residential development the parking provisions are to meet the requirements of *Part 22 of this DCP.*

9 For all non-residential premises, where the development is within 400m walking distance of a train station entry and within a Local Centre located on the train line (Turramurra, Pymble, Gordon, Lindfield and Roseville), the following parking rate ranges apply:

Premises	Parking Space Requirement Range
Office and business premises	1 space per 33m^2 GFA to 1 space per 45m^2 GFA Suggested division: 90% employee; 10% visitor Plus 1 space if resident/manager or caretaker Plus 1 courier space for development in excess of 200m^2 GFA
Retail	1 space per 26m^2 GFA to 1 space per 33m^2 GFA Suggested division: 30% employee: 70% visitor

Note: A Traffic Impact Assessment is to accompany development applications that seek to vary the parking rates. This includes commercial or strata funded car share schemes in lieu of parking spaces.

Note: Any spaces provided which exceed the upper range are to be included in the calculation of gross floor area.

10 For all non-residential development located more than 400m from a train station, car parking is to be provided in accordance with the parking rates in *Part 22R.1.*

11 A minimum of 1 space or 1-2% (whichever is greater) is to be provided for accessible car parking for people with a disability.

12 10% of total parking within office developments is to be provided for visitors.

13 Consideration is to be given to accommodation of other road users, such as motor cycles and minibuses.

14 Parking provision at a rate less than 1 per 45m^2 GFA may be considered if accompanied by firm and ongoing proposals to encourage alternative means of transport. This may include strategies such as:

i) Transport Access Guides (TAG);

ii) Staff discount/subsidy towards public transport costs;

iii) Dedicated shuttle bus between the development and railway station;

9B.2 CAR PARKING PROVISION (continued)

Controls

iv) Adoption and implementation of a car pool/car sharing scheme;

v) Use of taxis or public transport for work related journeys;

vi) Priority parking for staff who pool with 2 or more passengers.

Any proposed alternate scheme is to establish a plan with measurable targets and is to be regularly publicised and monitored.

15 At least one car share space is to be provided.

Note: any proposed reduction in car parking on the basis of providing car share space/s is to be justified by the proponent through supporting studies.

Figure 9B.2-4:
Broad canopy trees shading for at grade car parking.

9B.3 BICYCLE PARKING PROVISION

Further controls that may apply		
		SECTION C **PART 22.7 -** Bicycle Parking and Facilities

Objectives

1 *To provide safe and easily accessible bicycle parking.*

2 *To provide amenities related to use of bicycles and public transport.*

Controls

1 For all office buiidings and office components of mixed use buildings, provide on-site, secure bicycle parking spaces and storage at the following rates:

i) 1 bicycle locker per 200m^2 of gross floor area (GFA) for staff; and

ii) 1 bicycle parking space (in the form of a bicycle rail) per 750m^2 over 1000m^2 GFA (minimum) for visitors.

2 At least one shower with changing and locker facilities is to be provided on each floor within office buildings and office components of mixed use buildings. .

Figure 9B.3-1: Bicycle Storage Area.

9C Building Design and Sustainability

READ WITH

SECTION A
PART 1B: Dictionary
PART 8 - Mixed Use Development
- 8C.14: Ground Floor Commercial Use
- 8C.15: Awnings
- 8C.16: Colonnades

PART 12 -Signage And Advertising

SECTION B
PART 14 - Urban Precinct and Sites
PART 20 - Development Near Road or Rail Noise

SECTION C
PART 23 - General Building and Sustainability
- 23.5: Roof Terraces and Podiums
- 23.8: General Acoustic Privacy
- 23.4: Material Finishes and Colour

9C.1 SOLAR ACCESS

Objectives

1 *To ensure a high level of internal amenity for all occupants with direct access to daylight.*

2 *To minimise the impact of overshadowing on living areas, and on private and communal open space areas of neighbouring buildings.*

3 *To minimise the impact of development on existing solar collection devices.*

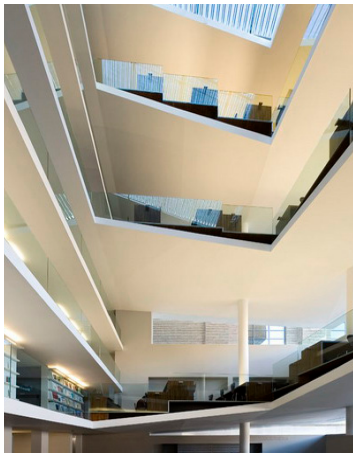


Figure 9C.1-1:
Internal atrium space to promote daylight access.

Controls

1 Buildings are to be oriented to optimise the northern aspect.

2 Use light shelves, reflectors, lightwells, skylights, atriums and clerestories where possible to maximise the quantity and quality of natural light within internal areas.

3 Developments are to allow the retention of a minimum of 4 hours direct sunlight between 9am to 3pm on 21st June to all existing neighbouring solar collectors and solar hot water services.

Office shading

4 At least 90% of all workspaces are to be within 10m and in direct line of sight of a perimeter window.

5 All developments are to allow the retention of at least three hours of sunlight between 9am and 3pm on 21st June to the living areas and the principal portion of the private and communal open space of any residential development on adjoining lots.

6 Where existing overshadowing by buildings is greater than this, sunlight is not to be reduced by more than 20%.

Sun shading

7 All developments are to utilise shading and glare control. For example:

i) provide external horizontal shading to north-facing windows, such as eaves, overhangs, pergolas, awnings, colonnades, upper floor balconies, and/or deciduous vegetation;

ii) provide vertical shading to east and west windows, such as sliding screens, adjustable louvres, blinds and/or shutters;

iii) provide shading to glazed and transparent roofs;

iv) use low glare high performance glass with an overall 3 star Window Energy Rating Scheme rating

Note: Refer to *www.wers.net*

v) avoid the use of reflective films;

vi) use a glass with reflectance below 20%.

8 All shading devices are to be integrated with building facade design.

9 Consideration is to be given to the integration of solar shading with solar energy collection technology.

9C.2 NATURAL VENTILATION

Objectives

1 *To enable opportunities for natural ventilation.*

Figure 9C.2-1:
Atrium to provide natural ventilation.

Controls

1 Wherever possible, provide dual aspect floor space to aid cross ventilation.

2 The use of open plan floor areas is encouraged to minimise interruptions in air flow by partitions and furniture.

3 Wherever possible, courtyard / atrium / thermal chimneys are to be provided to enable warm air to be drawn up and escape through roof ventilation.

Offices

4 All workspaces are to have operable windows or doors which open to at least 30% of the window or door areas.

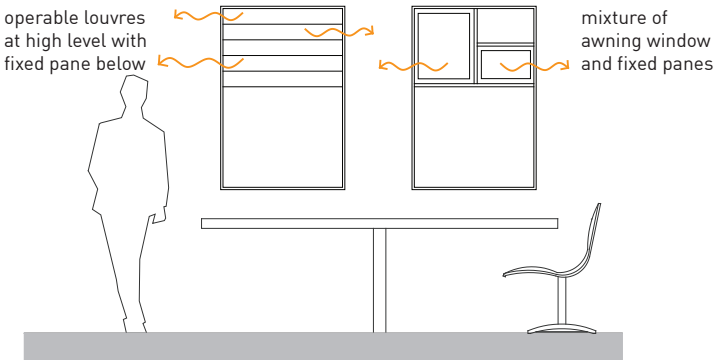


Figure 9C.2-2:
Operable windows enabling ventilation.

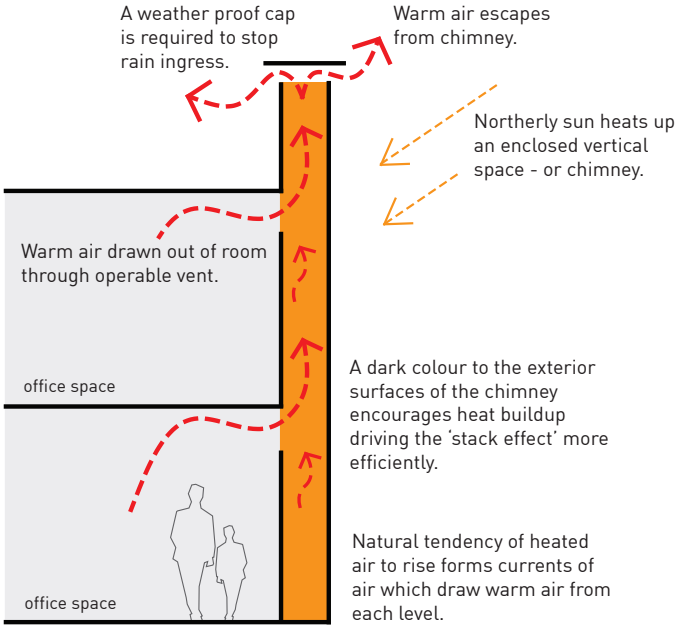


Figure 9C.2-3:
Section showing thermal chimney 'stack effect'.

9C.3 FLOOR DEPTH

Objectives

1 To provide good internal amenity for occupants through provision of sun access and natural ventilation.

Controls

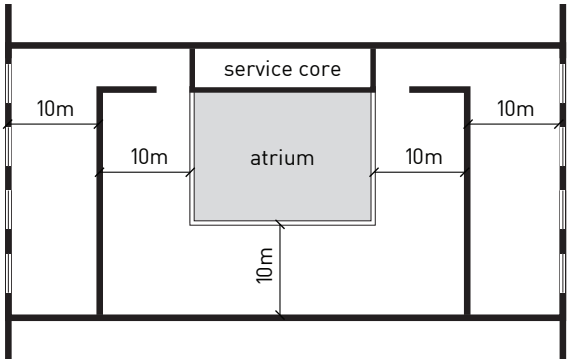
1 Circulation, services and storage areas are to be located at the centre of the building to maximise opportunity for external openings for daylight access and views.

2 Atriums and courtyards are encouraged to promote access to natural light.

Offices

3 The maximum internal plan depth of office floors is to be 10m from glass line to internal face of wall. See *Figure 9C.3-2*.

Figure 9C.3-1:
Internal atrium space to promote daylight access.



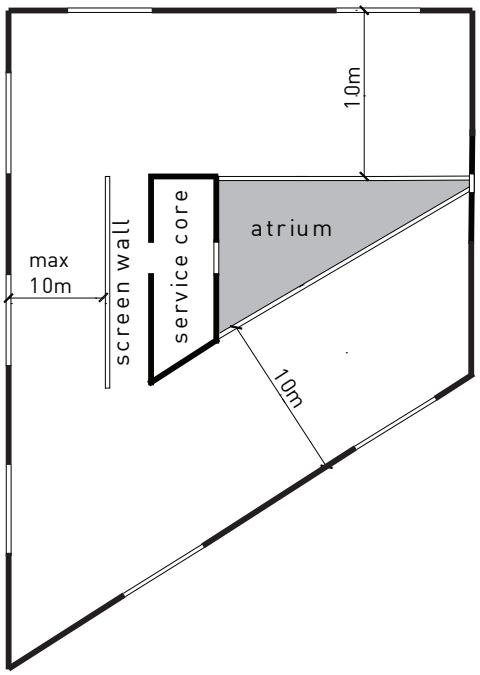


Figure 9C.3-2:
Internal plan depth controls for offices.

9C.4 BUILDING ENTRIES

Further controls that may apply		
SECTION A **PART** 8C.14: Ground Floor Commercial Uses		

Objectives

1 *To ensure that the building entry is clear and easily identifiable in the street, and is accessible to all.*

2 *To ensure that the building entry contributes positively to the building facade design, streetscape and enhances the active street frontage.*

Controls

1 Provide access to and within all developments in accordance with the *Disability Discrimination Act 1992*.

2 Buildings are to address the street either:

i) with main entrances to lift lobbies directly accessible and visible from the street; or

ii) with the path to the building entry readily visible from the street where site configuration promotes a side entry.

3 Building entries are to be integrated into building facade design. At street level, the entry is to be articulated with awnings, porticos, recesses or projecting bays for clear identification.

4 Building entrances from primary street frontages are to be level with adjoining footpaths.

Note: Footpath levels are not to be changed. All level adjustments are to occur on private lands.

5 All entry ramps for disabled access are to be located inside the building facade and integrated into the lobby entrance design. Measures to enable disabled access are not to dominate the front facade.

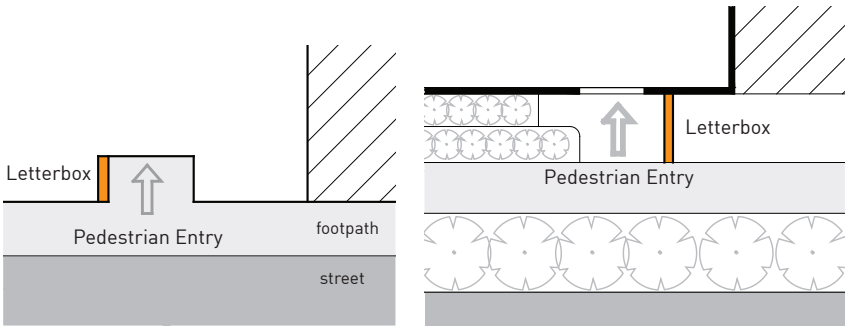


Figure 9C.4-2:
Letterbox to be positioned at 90þ to the street.

9C.4 BUILDING ENTRIES (continued)

Controls

6 All entry areas are to be well lit and designed to avoid any potential concealment or entrapment areas.

7 Fire egress is not to face the primary street frontage. If this is unavoidable, the egress is to be integrated into the lobby entrance design.

8 Lockable mail boxes are to be provided close to the street and under a shelter. They are to be integrated with building entries at 90° to the street and to Australia Post standards.

9 Entries are to have street numbering that is clearly visible from the street.

10 Entries to ground floor retail development are to comply with *Part 8C.14*

Figure 9C.4-1:
Office building entry using different colour, materials.

9C.5 INTERNAL COMMON CIRCULATION

Objectives

1 *To provide accessible, safe and pleasant circulation spaces for all occupants and users.*

2 *To minimise ongoing maintenance costs by providing natural light and efficient lighting to circulation areas.*

Figure 9C.5-1
Well designed foyer/atrium with seating areas provided.

Controls

1 The design of internal common circulation space is to comply with the provisions in *AS1428.1* and *AS1428.2* to provide adequate pedestrian mobility and access.

2 All common circulation areas including foyers, lift lobbies and stairwells are to have:

i) appropriate levels of lighting with a preference for natural light where possible;

ii) short corridor lengths that give clear sight lines;

iii) clear signage to offices and facilities;

iv) natural ventilation; and

v) low maintenance and robust materials.

3 Where artificial lighting is required, energy efficient lights are to be used in conjunction with timers or daylight controls.

4 Building design is to avoid blind corner or dark alcoves near lifts and stairwells, at entrances, along corridors and walkways, and within car parks.

Offices

5 Seating areas are to be provided within the foyer/atrium and are encouraged in common circulation areas near workspaces.

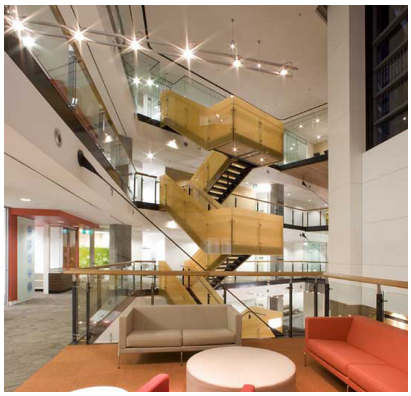


Figure 9C.5-2:
Well designed internal common circulation areas.

9C.6 ROOF FORMS, TERRACES AND PODIUMS

Further controls that may apply		
		SECTION C **PART 23.5 -** Roof Terraces and Podiums

Objectives

1 *To ensure that the design of the top floor of buildings minimises visual bulk.*

2 *To provide articulation that prevents any increased overshadowing.*

3 *To encourage the use of the roof top areas for open space.*

4 *To contribute to the overall design and environmental performance.*

Figure 9C.6-1:
Expressive roof form to articulate building.

Figure 9C.6-3:
Communal eating area on roof terrace .

Figure 9C.6-4:
Communal garden on terrace

Controls

1 Roof forms are encouraged to articulate and express building elements or location.

2 Service elements are to be integrated into the overall design of the roof so as not to be visible from the public domain or any surrounding development. These elements include lift overruns, chimneys, vent stacks, communication devices and signage.

3 Where solar panels are provided they are to be integrated into the roof line.

4 Flat roofs/roof terraces are to be used for communal open space for recreation use.

5 The incorporation of green roofs and podiums is encouraged.

6 Where podiums and roof terraces are used for open space, planter boxes are to be incorporated into walls or balustrades for privacy and amenity. See *Figure 9C.6-5*.

Figure 9C.6-2:
Lift over-run designed to complement building.

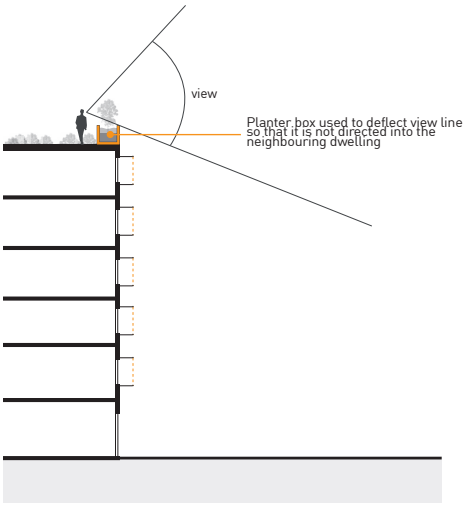


Figure 9C.6-5:
Incorporation of planter boxes into walls or balustrades of roof terraces

9C.7 COMMUNAL OPEN SPACE

Further controls that may apply		
		SECTION C **PART 23.5 -** Roof Terraces and Podiums

Objectives

1 *To provide useable, attractive and accessible communal open space that adds to the amenity of the development and facilitates social interaction.*

2 *To provide communal open space that is responsive to the site and its context.*

3 *To ensure high quality communal open space that is well integrated within the development.*

Controls

Offices

1 An area of communal open space is to be provided for staff recreation, appropriate to the needs of the particular premises.

2 Communal open space is to be located at ground level behind the building line or on roof terraces and podiums.

3 Access to communal open space is to be provided for people with a disability in accordance with Part 2 Section 7 of AS1428 Access within the largest area of communal open space is to be provided for people with a disability.

4 The location and design of communal open space is to optimise opportunities for social and recreation activities, solar access and orientation, summer shade, outlook and the privacy of adjoining residential sites.

5 Ground level communal open space is to be integrated with significant natural feature(s) of the site and soft landscaping areas.

6 The communal open space is to be capable of surveillance from workspaces for safety reasons.

7 Concealment or entrapment are not to be created within the communal open space.

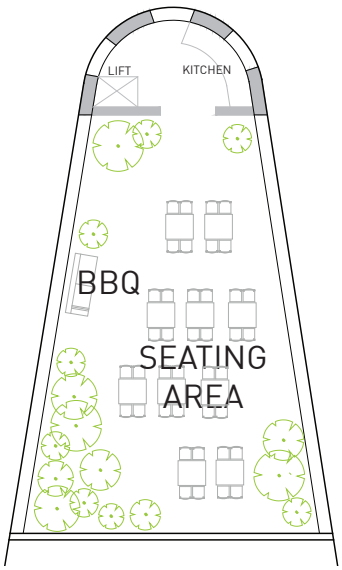


Figure 9C.7-1:
Roof top garden used as communal open space.

9C.7 COMMUNAL OPEN SPACE (continued)

Controls

8 Communal open space is to be well lit with an energy efficient lighting system to be used in conjunction with timers or daylight controls. All light spill is prohibited.

9 Shared facilities such as barbecue facilities and seating are to be provided within the communal open space.

10 Garden maintenance storage areas and connections to water and drainage is to be provided to communal open space.

11 Where communal open space is provided on roof terraces and podiums, the design considerations are to include:

i) incorporating sun shading devices and wind screens to encourage usage;

ii) incorporating landscaping elements including small to medium trees;

iii) a maximum wind speed of 10m/sec. This may be achieved by:

- Use of building facade design and setbacks to deflect downwards drafts;
- Awning design to deflect winds away from footpath level;
- Use of vegetation and tree canopy as buffer to the street level from winds..

9C.8 BUILDING FORMS AND FACADES

Further controls that may apply		
SECTION A **PART 12 -** Signage and Advertising		**SECTION C** **PART 23.4 -** Materials, Finishes and Colours

Objectives

1 *To promote buildings of high architectural quality that contribute to the desired local character.*

2 *To create building facades that reduce the bulk and scale of the building.*

3 *To create building facades that are environmentally responsive.*

4 *To integrate building elements into the overall building form and facade design.*

5 *To ensure that building facade design contributes to the safety of the public domain.*

Figure 9C.8-1: Segmenting of building facade to create interesting elements.

Controls

1 Buildings are to have a maximum floor plate of 1200 sqm.

2 Where sites require larger floor plates, they are to be expressed as separate building elements of not more than 1200m^2.

3 The continuous length of a single building on any elevation is not to exceed 60m. Where the building length is proposed to be greater than 60m, a recessed or articulated area is to be provided sufficient to present to the street as a separate building.

4 All building facades at ground level are to engage with and contribute to the activities of the street principally through the use of glazed frontages.

Note: Refer to *9C.10 of this Part* for ground floor frontage controls.

5 Monolithic structures with repetitive elements are to be avoided by segmenting building facades into vertical elements with individual modulations.

6 Building elements are to be expressed through use of rhythm and patterns of windows, material, colour and texture to create dynamic facades. For example, use of recessed balconies and deep windows to create contrasting areas giving the facade visual depth.

7 The building layout or structure is to be expressed within the facade.

8 Building facades are to be designed to respond to solar access by using solar protection elements such as overhangs and other sun shading devices as environmental controls.

9 All building elements including shading devices, signage, drainage pipes, awnings/colonnades and communication devices are to be coordinated and integrated within the overall facade design.

Note: See *Part 12 of this DCP* for signage requirements.

10 Balconies that run the full length of the building facade are not permitted.

11 Balconies are to be partially recessed and not project more than 1.2m from the outermost wall of the building facade.

12 Blade walls are not to be the sole element used to provide articulation.

9C.9 CORNER BUILDING ARTICULATION

Further controls that may apply		
SECTION A **PART 1B -** Dictionary		

Objectives

1 *To provide distinct building articulation on corner sites that reinforce the street intersection and create landmark.*

2 *To provide landmark buildings that are recognised from a distance.*

Controls

1 Corner buildings are to address both street frontages.

2 Street corners are to be emphasised by giving visual prominence to parts of the building facade. This may be achieved through

i) a change in building articulation

ii) a change in building material of colour

iii) a change in height

iv) roof expansion

v) staged setbacks or curves

vi) corner entry

3 Buildings in landmark positions are to be of a high architectural quality and contribute significantly to the local built environment.

Note: Refer to *Part 1B of this DCP* for the definition of a landmark building.

Figure 9C.9-1:
Corner articulation using height and colour changes.

9C.10 GROUND FLOOR FRONTAGE

Objectives

1 To provide ground floor facades that enhance public domain amenity and safety.

2 To create active street frontages that facilitate direct physical and visual connection between the private and public domain.

3 To support pedestrian activity and enhance the amenity, safety and surveillance of the public domain.

Controls

1 Buildings are not to have a continuous length of blank wall of more than 30% of the length of the building facade at the street level.

2 Ground floor building articulation is to be designed to avoid the creation of entrapment areas.

3 External finishes at street level are to be robust and graffiti resistant, eg. ceramic tiles and metal.

4 Provide predominantly clear glazing to all street frontage windows with a minimum 3 star Window Energy Rating Scheme rating.

Note: Refer to *www.wers.net*.

5 Security roller shutters are not permitted on the external face of the building. Where they are deemed necessary, grilles or transparent security shutters are to be located internally.

6 Where ancillary services such as cafes are provided, they are to be located within the foyer/atrium area and have good visual connection with the foyer and building entry.

7 Ground floor frontages to retail units are to comply with Part 8C.14.

8 Ground floor frontages are to provide for active uses that contribute to the active street frontage.

9 Building slabs are to be stepped on sloping sites to ensure ground floor level does not exceed 0.3m above or below finished footpath level.

Note: Variations may be permitted on very steep streets.

10 Building entries to each individual commercial premises are to be level with adjoining footpaths, with openings (doors and windows) that allow a direct visual connection between the building and the street.

Note: Variations may be permitted on very steep streets.

9C.10 GROUND FLOOR FRONTAGE (continued)

Objectives

Figure 9C.10-2:
Office building is to have active street frontage.

Controls

Offices

11 Office buildings within B2 and B4 zones are to comply with *Part 8C.14 of this DCP.*

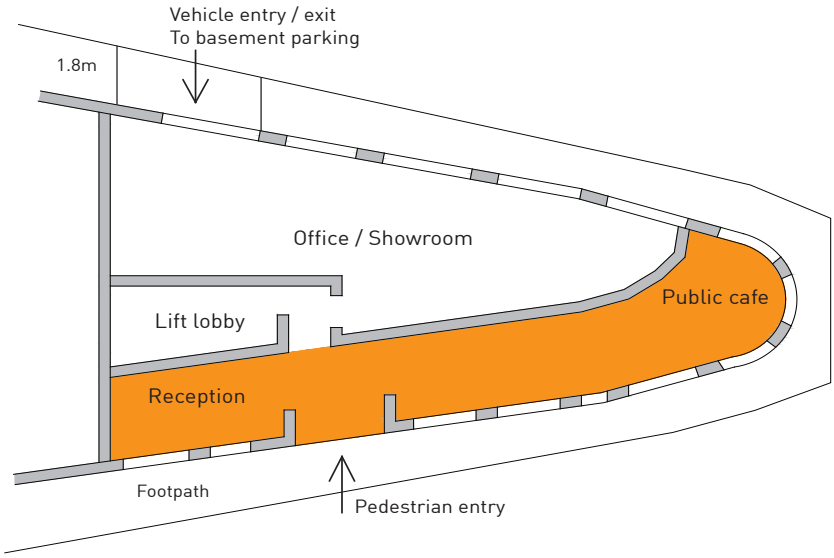


Figure 9C.10-1:
The use of glazed frontages on street level to provide passive surveillance.

9C.11 AWNINGS AND COLONNADES

Further controls that may apply		
SECTION A **PART 8C.11 -** Awnings **PART 8C.12 -** Colonnades	**SECTION B** **PART 14 -** Urban Precinct And Sites	

Objectives

1 *To ensure that awnings and colonnades are in keeping with desired streetscape character and with the overall development in scale and overall design.*

2 *To provide awnings and colonnades that increase pedestrian amenity with sun and rain protection.*

3 *To create well lit, visible street frontages that deter vandalism.*

Controls

1 Where an awning is provided, under awning lighting is to be recessed into the soffit of the awning or wall mounted on the building.

2 Under awning lighting is to achieve luminance levels consistent with community safety and security in *AS1228.1- 2001*. The lighting is to be high energy efficiency with LED diode technology preferred unless an alternate technology with equivalent or higher energy efficiency is used.

3 All colonnade spaces are to be within the property boundary.

4 The size and spacing of supports are to be designed to allow pedestrian circulation and views of ground floor activity from the street.

5 On sloping sites a level access point is to be provided between colonnade area and adjoining footpaths.

6 Awnings and colonnades to retail units are to comply with Part 8C.15 and 8C.16.

Offices

7 Office buildings within B2 and B4 zones are to comply with the controls within *Part 14, Parts 8C.15 and 8C.16 of this DCP*.

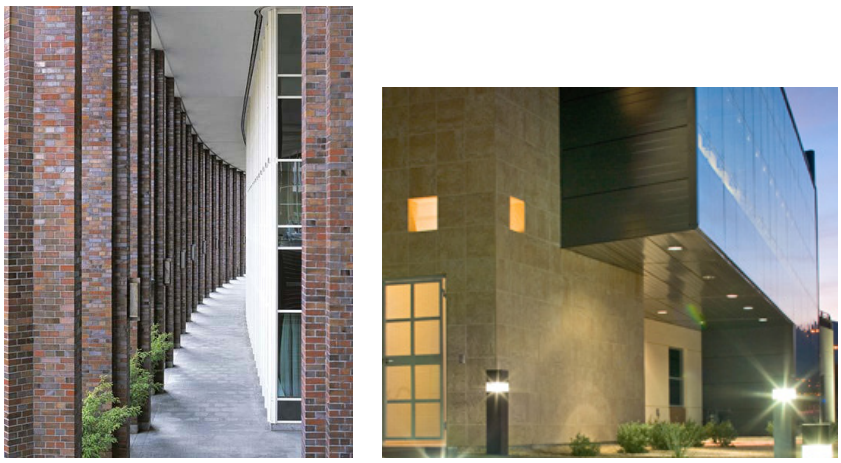


Figure 9C.11-1:
Building form used as awning and colonnade.

9C.12 INTERNAL CEILING HEIGHTS

Objectives

1 *To ensure internal ceiling heights that contribute to flexibility and adaptability of use in the future.*

2 *To ensure internal ceiling heights are appropriate for the intended use.*

Controls

Offices

1 All office developments are to comply with the following minimum ceiling heights, measured from finished floor level (FFL) to finished ceiling level (FCL):

i) 3.5m for ground floor / street level retail or commercial uses;

ii) 3m for all other floors for commercial use.

2 Internal ceiling heights and slab levels are to be coordinated with external height requirements and key datum lines. External building elements requiring coordination include:

i) heights, datum and parapet lines set by the context or structure plan;

ii) cornices and string courses of adjacent heritage buildings;

iii) exterior awning levels or colonnade heights.

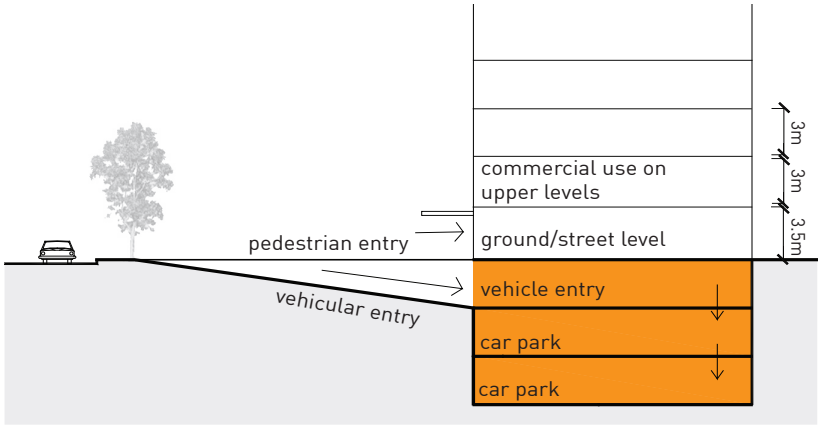


Figure 9C.12-1:
Finished floor levels to office buildings.

9C.13 VISUAL PRIVACY

Objectives

1 To ensure high standards of visual privacy for residents and neighbours

Controls

1 Buildings are to be designed to ensure privacy for neighbouring residents without compromising access to light and air. Measures to achieve this include:

i) off-setting windows in adjacent buildings;

ii) recessing balconies or providing vertical fins between adjacent balconies;

iii) using louvres/screen panels;

iv) providing vegetation as a screen between spaces;

v) incorporating planter boxes into walls or balustrades to allow plant screening;

vi) utilising pergolas or shading devices to limit overlooking of lower building levels or communal and private open space.

Figure 9C.13-1:
Operable external blinds to provide visual privacy and sun shading.

9C.14 ACOUSTIC PRIVACY

Further controls that may apply		
	SECTION B **PART 20-** Development Near Road or Rail Noise	**SECTION C** **PART 23.8 -** General Acoustic Privacy

Objectives

1 *To ensure high standards of acoustic privacy for all occupants of the development.*

2 *To mitigate the impact of noise and vibration from the operation of commercial development.*

3 *To ensure office building adjoining main roads are designed and constructed to minimise the impact of external noise on the occupants.*

Controls

1 Where an office development adjoins a residential development, mechanical plant equipment and building services are to be located away from the residential building and have appropriate acoustic insulation.

2 For requirements on noise levels associated with air conditioning, kitchen, bathroom, laundry ventilation, or other mechanical ventilation systems and other plant refer to Part 23.8 of this DCP.

3 The maximum LAeq (1 hour) noise levels as measured at the windows of commercial workspaces are not to exceed the following:

Day: 55 dB(A)

Night: 45 dB(A)

Note: Day is the period from 7:00am to 9:00pm Monday to Saturday; or 8:00am to 8:00pm on Sundays and public holidays.
Night is the remaining period.

4 Noise reduction measures to achieve these outcomes may include, but are not limited to the following:

i) incorporating appropriate noise shielding or attenuation techniques into the design and construction of the building. In particular, noise shielding will be required between uses, walls and floors;

ii) enclosing plant rooms;

iii) locating plant in basements;

iv) fitting out building services, (including plant, piping and ducting) with appropriate acoustic insulation;

v) minimising the amount of shared walls between commercial occupancies and/or plant;

vi) locating building services (laundries/ storage areas) and circulation zones) away from noise sensitive areas (ie. workspaces) to provide a buffer from noise generators, such as traffic, mechanical plant equipment, and service and loading vehicle entries

vii) using solid core doors, thicker window glass, double glazing, baffles to openable windows.

5 An Acoustic Impact Assessment report prepared by a suitably qualified and experienced acoustic consultant is to be submitted.

9C.15 FENCING

Objectives

1 To provide an open landscaped street character.

Controls

1 Street fencing is not supported. Where setbacks to the street are required, boundaries are to be delineated by soft landscaping including, but not limited to, shrubs and trees of varied mature height.

2 Where landscaping is provided along the street alignment, a physical edge, such as a planter box or retaining wall is to be no higher than 1m above finished ground level.

3 Side and rear fencing are to be avoided. If side or rear fencing is required, it is to be a maximum of 1.2m high and visually transparent. (A transparent fence has an open to solid ratio of not less than 1:3).

THIS PAGE IS INTENTIONALLY BLANK