Economic Development Queensland

Medium and high rise buildings

PDA guideline no. 08

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Introduction

Purpose of the guideline

This guideline outlines the standards for the design of medium and high rise buildings in Priority Development Areas (PDA) in Queensland. This guideline should be read in conjunction with the provisions of PDA development schemes, interim land use plans (ILUP) and relevant PDA guidelines and practice notes. A development scheme or ILUP may specify a different standard or specific response. PDA *Guideline no.1 Residential 30* complements and supports this guideline. This guideline takes precedence in the event of any inconsistencies with Guideline no.1.

In consultation with the Minister for Economic Development Queensland (MEDQ) and other relevant parties, applicants may propose alternative, innovative solutions which do not comply with the following standards but meet the PDA-wide criteria or related provisions of ILUPs.

For the purpose of this guideline medium and high rise buildings are defined as:

Medium rise - 3-6 storeys

High rise - 7+ storeys.

Design standards

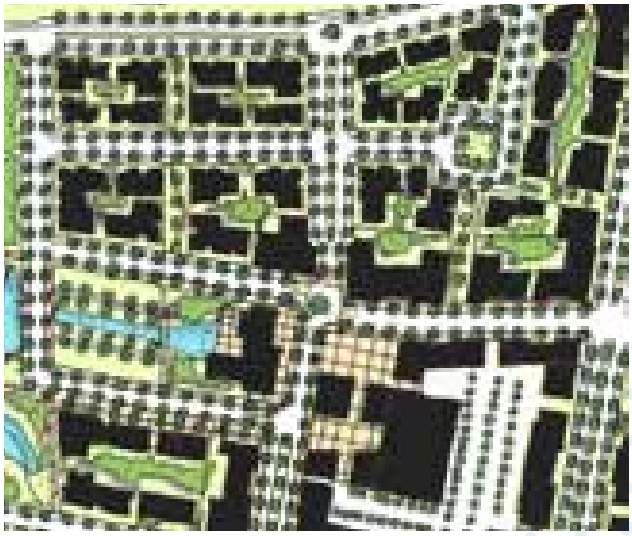
Building form

Building form is related to the overall shape or configuration of a building including its placement on the site and in relation to other buildings and spaces.

	High rise (7+ storeys)		Medium rise (3-6 storeys)	
	Residential elements	**Non-residential elements**	**Residential elements**	**Non-residential elements**
Typical form	High rise residential apartments	Commercial or Mixed Use building with residential above commercial and/or retail	Medium rise residential apartments	Commercial or Mixed Use building with residential above commercial and/or retail
	Perimeter built forms create internal communal open spaces and courtyards in both residential and commercial developments or frame public spaces (see Figure 1).			
	Buildings orientate towards and overlook streets and public spaces (see Figure 2).			
Climatic response	» Buildings achieve a 5 star rating through the *National Australian Built Environment Rating System* (NABERS). » Buildings have generous cross ventilation from balcony areas through habitable rooms and dwelling units. » Orientate buildings to promote seasonal solar heat gain or loss taking into consideration major site views and vistas (see Figure 2). » Large building facades incorporate architectural wall shading to reduce solar heat gain. » External windows have sun shading.			

Figure 1: Perimeter built forms

Perimeter built forms define streets and the public realm allow buildings to overlook streets and create private internal courtyards.



Legend

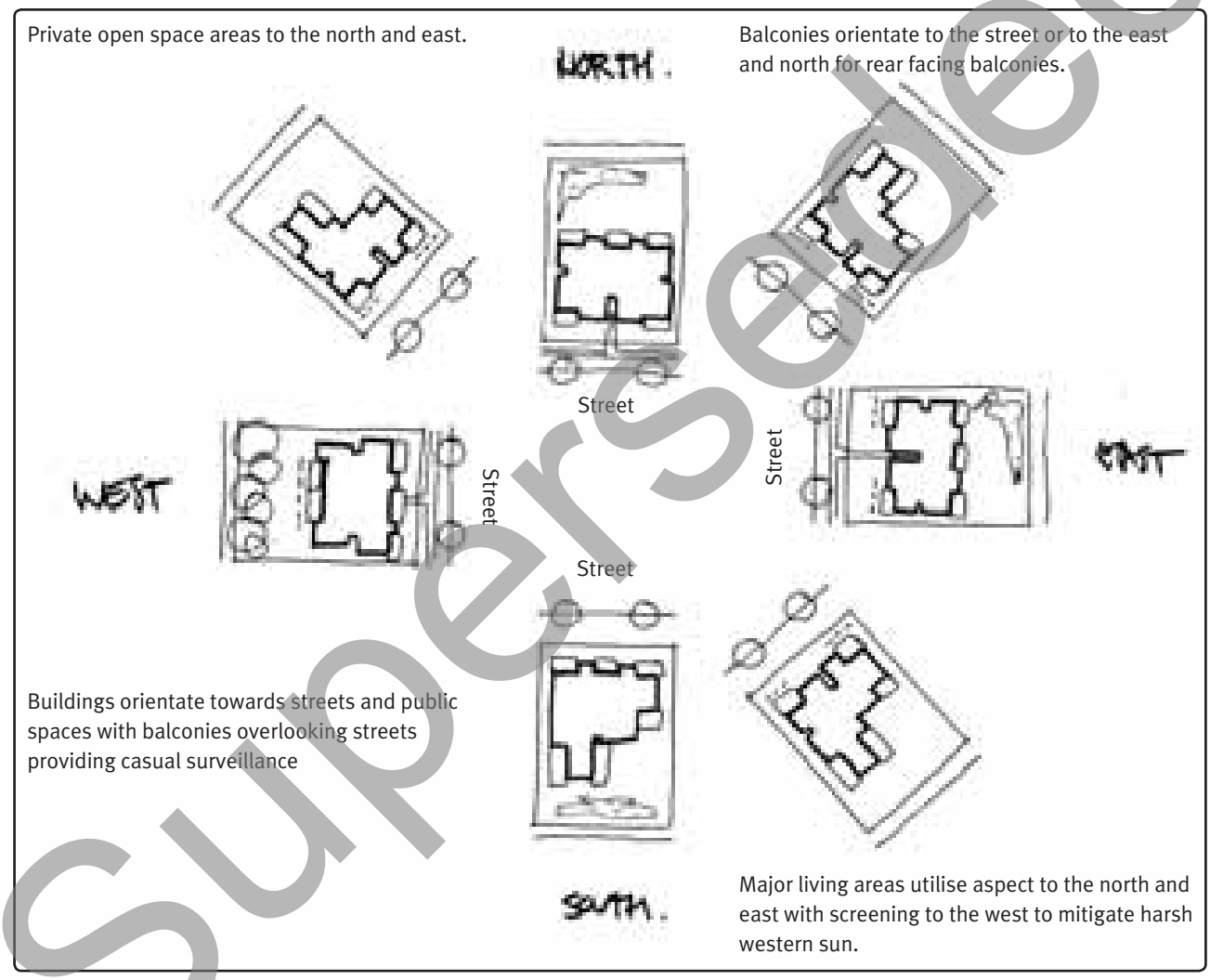
Street tree planting

Plaza

Built form

Park/Open Space

Figure 2: Design for climatic and street orientation



	High rise (7+ storeys)		Medium rise (3-6 storeys)	
	Residential elements	**Non-residential elements**	**Residential elements**	**Non-residential elements**
Maximum height	Refer to Development Scheme			
Maximum podium height	3 storeys - unless specified in a development scheme		2 storeys - unless specified in a development scheme	
Street setbacks (min)				
» Active frontage*	0.0m	0.0m	0.0m	0.0m
» Non-active frontage	1.5m	0.0m	1.5m (see Figure 3)	0.0m (see Figure 4)
Side setbacks (min)				
» Levels 1-3**	Where adjoining a non-residential use or the minimum setback on the adjoining boundary is 0.0m: 0.0m Otherwise: » 1.5m for a wall up to 4.5m high » 2m for a wall up to 7.5m high » 2m plus 0.5m for every 3m (or part thereof) over 7.5m high for a wall over 7.5m high, except that a wall may be built to a side boundary where the wall has a maximum height of 3m and a maximum length of 15m, unless it abuts a higher or longer existing or simultaneously constructed wall.			
» Levels 4-8	3.0m			
» Levels 9+	6.0m			
Rear setbacks				
» Levels 1-3**	Where adjoining a non-residential use or the minimum setback on the adjoining boundary is 0.0m: 0.0m Otherwise: 3.0m			
» Levels 4+	6.0m			

* A site may have more than one active frontage as identified in a development scheme, sub-precinct or approved plan of development. An active frontage can include a frontage to a park.

** Or such higher podium level as may be specified in a development scheme, sub-precinct plan or approved plan of development.

Figure 3: Front setback relationship for residential uses on non-active frontages

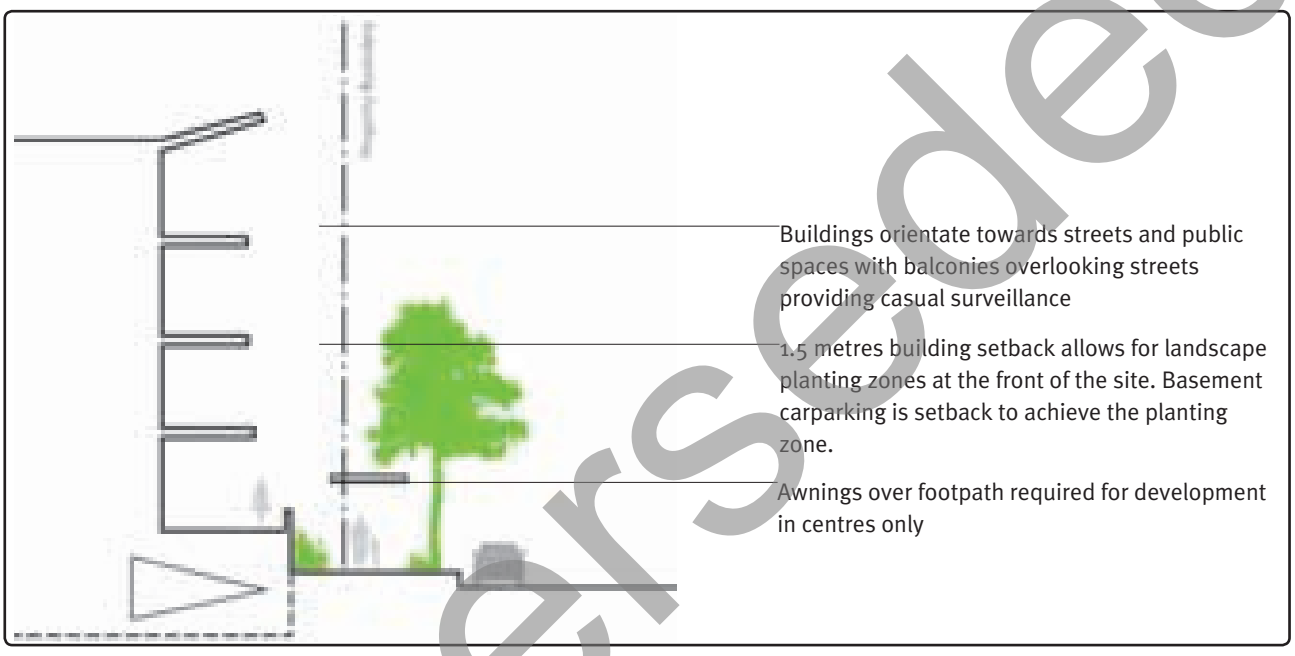
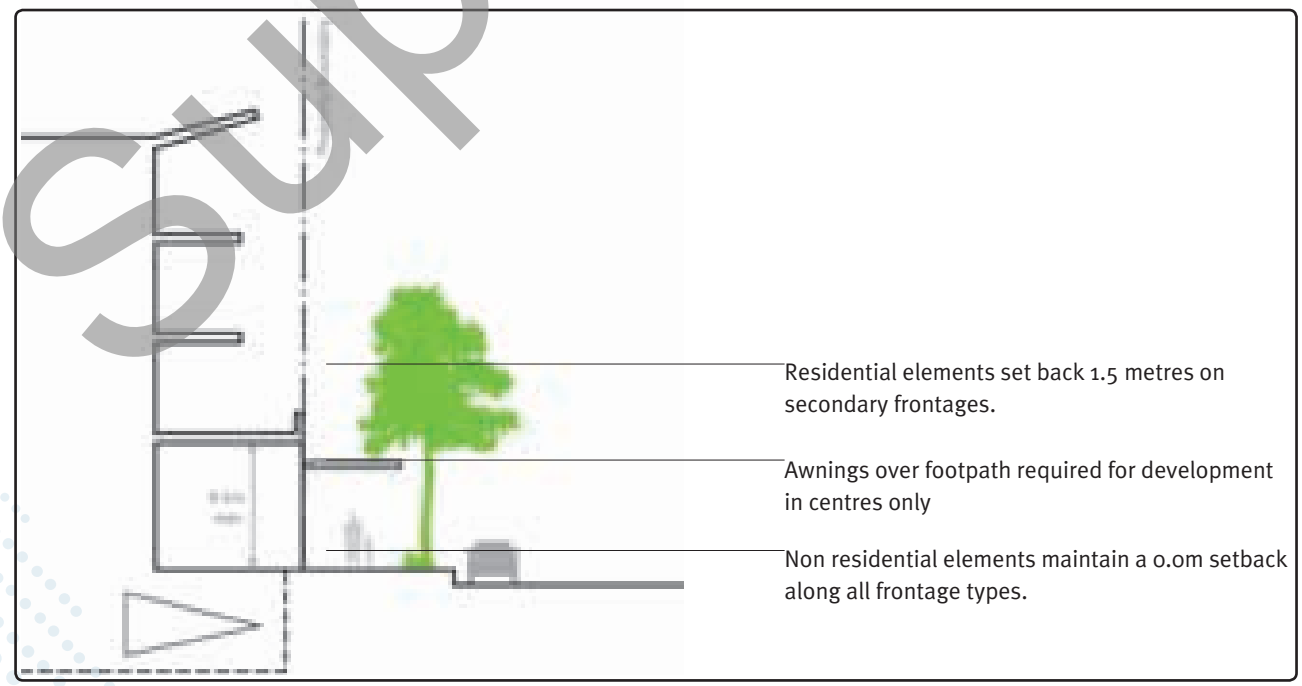


Figure 4: Front setback for non residential elements



	High rise (7+ storeys)		Medium rise (3-6 storeys)	
	Residential elements	**Non-residential elements**	**Residential elements**	**Non-residential elements**
Privacy	Building design must ensure privacy for habitable spaces in dwellings. Acceptable treatments include: » Providing a minimum separation distance of: » 18m between balconies that are offset by less than 45 degrees (see figures 5 and 6) or 12m between balconies that are offset by 45 degrees or more » 12m between windows or between a window and a balcony that are offset by less than 45 degrees, or 9m between windows or between a window and a balcony that are offset by 45 degrees or more, or » for a wall containing windows or balconies, 6m to a side or rear boundary where there is no existing or approved development and the future privacy and development potential of the adjoining site should be protected. » Window sill heights a minimum of 1.5m above floor level » Fixed opaque glazing in any part of a window below 1.5m above floor level » Fixed external screens to balconies or windows (or intermediate fencing at ground level). External screens or fences provided to ensure privacy should be either solid, of translucent material or present an appearance of no more than 25 per cent openings when viewed from the nearby balcony or window.			
Car parking	Car parking, service and loading bays are either integrated within or under buildings and sleeved by active frontages or behind buildings. Large blank screens to mask loading areas are not acceptable.			
End of trip facilities	End of trip facilities are provided in accordance with the Queensland Development Code MP4.1 - Sustainable Buildings.			

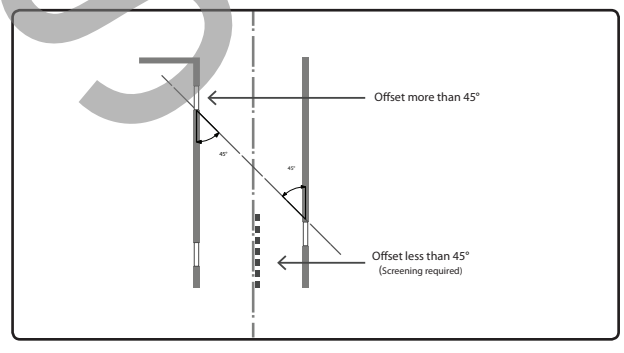


Figure 5: Opening offset

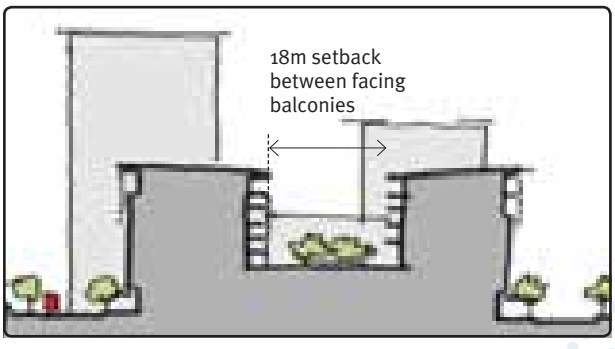


Figure 6: Setback between buildings

Building elements

Building elements are the detailed components of the building design and include surface materials and treatments, windows, doors, balconies, awnings, entries and landscaping.

	High rise (7+ storeys)		Medium rise (3-6 storeys)	
	Residential elements	**Non-residential elements**	**Residential elements**	**Non-residential elements**
Articulation of built form elements	Buildings have a distinct bottom, middle and roof. Upper levels of buildings are expressed differently, while lower floors respond to the street geometry (see Figure 7).		Lower floors respond to the street geometry.	
	Buildings on corners address both frontages. Front entries are expressed, well illuminated and have good passive surveillance (see Figure 8)			
	Podiums have a maximum unarticulated length of 40 metres.			
Balconies	Minimum 9 m² for 1 bed unit, 16 m² for 2+ bed unit (minimum dimension 3 metres).	N/A	Minimum 9 m² for 1 bed unit, 16 m² for 2+ bed unit (minimum dimension 3 metres).	N/A
Clothes drying	Where clothes drying areas are provided on private balconies they should be screened from public view.	N/A	Where clothes drying areas are provided on private balconies they should be screened from public view.	N/A
Ground floor detail	Individual dwelling entries and courtyards are directly accessible from adjoining streets and public spaces. Ground floor courtyards are raised 450-900 mm above adjoining street level*.	Ground levels of buildings present an attractive, active frontage to streets. Multiple building entrances are provided and are appropriately spaced to provide visual interest and activity. Window sills to retail tenancies are within 100 - 300 mm above the corresponding footpath level. Reflective glass is not appropriate.	Individual dwelling entries and courtyards are directly accessible from adjoining streets and public spaces. Ground floor courtyards are raised 450-900 mm above adjoining street level*.	Ground levels of buildings present an attractive, active frontage to streets. Multiple building entrances are provided and are appropriately spaced to provide visual interest and activity. Window sills to retail tenancies are within 100 - 300 mm above the corresponding footpath level. Reflective glass is not appropriate.
	The ground floor of all buildings within centres has a minimum floor to floor height of 4.5 metres (see Figure 4) to provide flexibility to accommodate changing uses over time.			

* Raised courtyards provide better privacy and allow for passive surveillance of the street

	High rise (7+ storeys)		Medium rise (3-6 storeys)	
	Residential elements	**Non-residential elements**	**Residential elements**	**Non-residential elements**
Awnings over footpaths - active frontage**	Continuous along entire frontage - minimum 3 metres over footpath (see Figure 9).			
Awnings over footpaths - secondary frontage (non active)**	Retail activities - continuous along frontage with a minimum 3 metres over footpath. Otherwise - minimum 3 metres over the footpath for the width of the main building entry			
Roof form	Roof forms are distinct visual elements that contribute to the architectural quality and appearance of the building (see Figures 7 and 10). Roof top plant and equipment are contained within roof forms and are screened from the street or from adjoining buildings using a consistent range of non-reflective materials to provide a cohesive design element.		Roof forms are distinct visual elements. Where building facades are longer than 20m roof forms assist in articulating the facade as a combination of distinct elements integrated with the facade design. Roof top plant and equipment are contained within roof forms and are screened from the street or from adjoining buildings using a consistent range of non-reflective materials to provide a cohesive design element.	
Fences	Open construction with at least 50 per cent visual permeability and no greater than 1.8 metres high above adjoining footpath.			
Landscape & recreation space	20 per cent of site area including 5 per cent of site area as deep planting. 5.0 metres minimum dimension		30 per cent of site area including 5 per cent of site area as deep planting. 5.0 metres minimum dimension	20 per cent of site area including 5 per cent of site area as deep planting. 5.0 metres minimum dimension
	Landscape and recreation areas can be provided in a variety of locations including rooftops, on podiums or at ground level. These areas should provide safe, comfortable and varied recreation opportunities, and at a minimum include basic facilities such as seating, shade and wind protection (either structures or planting) and flexible spaces suitable for a range of recreation activities. Innovative treatments, such as green roofs, green walls or community gardens that contribute to the attractiveness of these spaces are also encouraged.			

** The requirement for awnings over footpaths applies only to buildings within centres

Figure 7: Buildings have distinct bottom, middle and roof

Figure 8: Good buildings address both frontages on corner sites

Figure 9: Awnings extend over footpaths providing shade and weather protection

Figure 10: Roof forms assist in articulating facades as integrated design elements

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