

## Chapter 11 : Urban Design Guidelines

1. To promote Hong Kong’s image as a world-class city and to enhance the quality of our built-environment, this chapter provides guidelines on the major urban design issues and air ventilation to shape a better physical environment in aesthetic and functional terms and at macro and micro levels.
2. It may be necessary to refer to other relevant chapters in the HKPSG where appropriate in applying the urban design guidelines and striking a balance among various objectives to meet the needs of the community.

### Urban Design

3. Urban Design is an art of designing places for people and is one of the important elements in urban planning, especially for a compact and dynamic city like Hong Kong. It concerns about the total visual effect of building masses, connections with people and places, creation of spaces for movements, urban amenities and public realm, and the process for improving the overall townscape.
4. The guidelines for specific major urban design issues and land uses are summarised in the following table.

<b>Urban Design Guidelines</b>	
<b>(a) Specific Major Urban Design Issues</b>	
<b>Massing and Intensity in Urban Fringe Areas and Rural Areas</b>	<ul style="list-style-type: none"> <li>• Strengthen visual and physical linkages between urban and rural areas</li> <li>• Avoid out-of-context “sore thumb” development</li> </ul>
<b>Development Height Profile</b>	<ul style="list-style-type: none"> <li>• Lowering of building height where appropriate to maintain views to ridgelines / peaks or water body</li> <li>• Diversity in height in different localities</li> <li>• Gradation in heights from the high density core to the low density fringe</li> <li>• Respect low-rise neighbouring development by lowering building height</li> <li>• Use low-rise G/IC buildings as visual and spatial relief</li> <li>• Avoid monotonous development</li> <li>• Allow high-rise nodes at selected strategic locations</li> </ul>

<b>Urban Design Guidelines</b>	
<b>(a) Specific Major Urban Design Issues</b>	
Waterfront Sites	<ul style="list-style-type: none"> <li>• Allow variety of uses, e.g. leisure, cultural, tourism-related and recreational uses, for public enjoyment</li> <li>• Create interesting and active water edge with innovative building design</li> <li>• Vary building height profile with taller buildings inland and lower buildings on the waterfront</li> <li>• Avoid infrastructure projects which create visual and physical barrier</li> <li>• Avoid wall and land-locked effect by maintaining visual permeability to harbour</li> <li>• Provide view corridors and pedestrian / open space linkages to the waterfront</li> </ul>
Public Realm	<ul style="list-style-type: none"> <li>• Introduce identifiable features and setback at appropriate corner sites</li> <li>• Adopt high quality architectural design building façade and podium edge at ground and first floor levels</li> <li>• Encourage provision of open space at ground, podium and roof levels</li> <li>• Integrate pedestrian linkages with open space networks</li> <li>• Provide focal landmark features</li> <li>• Reserve more ground level spaces and setbacks for tree planting and street activities</li> <li>• Provide more green areas and amenity strips along circulation routes</li> </ul>
Streetscape	<ul style="list-style-type: none"> <li>• Provide shade for pedestrian</li> <li>• Reduce podium coverage to allow more open spaces at grade</li> <li>• Cater for the needs of disabled and elderly</li> <li>• Provide adequate pavement width to accommodate pedestrian flows, street furniture, roadside trees and other utilities installations</li> <li>• Encourage individualistic architectural design treatment to enhance interest at street level</li> <li>• Add vitality by provision of active street frontage and various street activities</li> <li>• Provide high quality pavement and street furniture</li> <li>• Segregation of vehicles and pedestrians through pedestrian priority facilities, vehicular / pedestrian underpasses, flyovers, footbridges and traffic calming measures</li> <li>• Provide direct linkages between activity nodes</li> </ul>

<b>Urban Design Guidelines</b>	
<b>(a) Specific Major Urban Design Issues</b>	
Heritage	<ul style="list-style-type: none"> <li>• Identify suitable new and compatible uses for heritage buildings</li> <li>• Minimise negative impact of a new development on neighbouring heritage features to ensure compatibility in scale, proportions, colour materials or architectural design with descending heights towards heritage features</li> <li>• Retain and enhance unique cultural and local characters</li> <li>• Create a sense of history in new neighbouring development through architectural form and building materials</li> <li>• Preserve or create suitable settings for heritage features</li> </ul>
View Corridors	<ul style="list-style-type: none"> <li>• Protect views to landmarks, ridgelines / peaks, water body, countryside and other natural features</li> </ul>
Stilted Structures	<ul style="list-style-type: none"> <li>• Screen unsightly raised structures or cutting with landscaping</li> </ul>
<b>(b) Specific Major Land Uses</b>	
Commercial	<ul style="list-style-type: none"> <li>• Reinforce waterfront buildings as the city's "Front Elevation"</li> <li>• Identify suitable criteria for mega towers' locations and restrict mega towers for few landmark locations</li> <li>• Use the commercial centre to create identity for residential area and district character</li> <li>• Create breezeways and pedestrianised zones</li> <li>• Strengthen legibility of street environment</li> <li>• Consider visual impact of rooftop structures and advertising signs</li> <li>• Provide efficient pedestrian networks at underground, ground and podium levels</li> </ul>
Residential and Village	<ul style="list-style-type: none"> <li>• Encourage comprehensive residential development</li> <li>• Vary building height, massing and form for visual interest</li> <li>• Adopt appropriate plot ratio, stepped height profile or building setbacks</li> <li>• Orientate building blocks / houses to minimise nuisance and other adverse impacts from bad neighbouring uses</li> <li>• Establish at-grade and podium level pedestrian linkages</li> <li>• Reduce vehicle speeds within residential development by provision of speed bump or other traffic calming measures</li> <li>• Maximise accessibility and usability of open space</li> <li>• Provide more greening within residential development</li> <li>• Allow adequate buffer with the surroundings</li> <li>• Adopt innovative building design or architectural imagery to establish a recognizable identity</li> <li>• Define entrance and focal point</li> <li>• Avoid infill development with incompatible architectural style in indigenous village core</li> </ul>

<b>Urban Design Guidelines</b>	
<b>(b) Specific Major Land Uses</b>	
Industrial	<ul style="list-style-type: none"> <li>• Respect land uses in neighbouring zones by provision of buffers</li> <li>• Minimise negative visual impact of provision of landscape buffer and breezeway</li> <li>• Screen parking facilities with planting</li> <li>• Incorporate open space with pedestrian network</li> </ul>

## **Air Ventilation**

5. For enhanced and long-term improvement of the wind environment in our city, it is important to optimise urban design for more wind penetration, especially to the public realm. The following table summarises the qualitative guidelines on air ventilation in land use planning, urban design, and planning and design of large-scale developments in the early stages before any actual undertaking of air ventilation assessment.

<b>Qualitative Guidelines on Air Ventilation</b>	
<b>(a) District Level</b>	
Site Disposition	<ul style="list-style-type: none"> <li>• Divide sites into parcels to avoid long and linear site geometry</li> </ul>
Breezeways/ Air Paths	<ul style="list-style-type: none"> <li>• Provide breezeways along major prevailing wind directions and air paths intersecting the breezeways</li> <li>• Create breezeways in forms of major open ways through the high-density/high-rise urban form</li> <li>• Link the amenity areas, building setbacks and non-building areas to form air paths</li> </ul>
Street Orientation, Pattern and Widening	<ul style="list-style-type: none"> <li>• Align an array of main streets/wide main avenues in parallel, or up to 30 degrees to the prevailing wind direction</li> <li>• The length of street grid perpendicular to the prevailing wind direction should be as short as possible</li> <li>• Introduce street widening schemes and align the longer frontage of development plots along the prevailing wind direction</li> <li>• Introduce setbacks and non-building areas especially for large sites facing narrow urban canyon</li> </ul>
Waterfront Sites	<ul style="list-style-type: none"> <li>• Building blocks along the waterfront should be of appropriate scale, height and disposition to avoid blockage of sea/land breezes and prevailing winds</li> </ul>

<b>Qualitative Guidelines on Air Ventilation</b>	
<b>(a) District Level</b>	
Height Profile	<ul style="list-style-type: none"> <li>• Adopt varying heights across the district with heights decreasing towards the prevailing wind direction</li> <li>• Decentralise low-rise buildings and open spaces within high-density neighbourhoods to create breathing spaces</li> <li>• Avoid congestion of tall buildings which will block the wind</li> </ul>
Greening and Disposition of Open Space and Pedestrian Area	<ul style="list-style-type: none"> <li>• Maximise planting in open space and on hillside</li> <li>• Planting of tall trees with wide and dense canopy in pedestrian area</li> </ul>
<b>(b) Site Level</b>	
Podium Structure	<ul style="list-style-type: none"> <li>• Avoid compact integrated developments and podium structures with full or large ground coverage on extensive sites</li> <li>• Adopt a terraced podium design to direct downward airflow to the pedestrian level</li> </ul>
Building Disposition	<ul style="list-style-type: none"> <li>• Provide adequately wide gaps between building blocks at a face perpendicular to the prevailing wind</li> <li>• Align the axis of the building blocks in parallel, or up to 30 degrees to the prevailing wind direction</li> </ul>
Building Permeability	<ul style="list-style-type: none"> <li>• Create gaps between building blocks, between the podium and the building blocks atop and at various building levels</li> </ul>
Building Height and Form	<ul style="list-style-type: none"> <li>• Adopt stepping height concept and built forms that can help optimise the wind capturing potential of development itself</li> </ul>
Landscaping	<ul style="list-style-type: none"> <li>• Maximise the amount and variety of effective green open spaces for individual developments</li> <li>• Planting of tall trees with wide and dense canopy in entrance plazas and setback areas</li> </ul>
Projecting Obstructions	<ul style="list-style-type: none"> <li>• Avoid projecting obstructions over breezeways/air paths</li> <li>• Avoid massive elevated road structures aligned by tall buildings in urban canyons</li> <li>• Projecting signboards should be vertical</li> </ul>
Cool Materials	<ul style="list-style-type: none"> <li>• Use cool materials in the pavements, streets and building facades</li> <li>• Provide cool sinks like trees and water body where appropriate</li> </ul>

6. To aid planning and design for better air ventilation through the city fabric, an advisory framework for the methodology to undertake air ventilation assessment is outlined in a Technical Guide for Air Ventilation Assessment for Developments in Hong Kong, which is downloadable from Planning Department's homepage <http://www.pland.gov.hk>.