

Chapter 8 : Internal Transport Facilities

1. This chapter provides the design standards and guidelines for planning land requirements for internal transport facilities including footpath and parking.
2. The recommended minimum carriageway widths in accordance with the Transport Planning and Design Manual are shown below:

Road Type	Carriageway Dual	Single Carriageway	Central Reserve
Expressway and Trunk Road	-	7.3m(2-lane) 11.0m(3-lane) 14.6m (4-lane)	2.3m (3.2m) #
Primary Distributor Road ⁺	-	6.75m (2-lane) 10.0m (3-lane) 13.5m (4-lane)	2.3m
District Distributor Road ⁺	7.3m (2-lane) 10.3m (2-lane) * 13.5m (4-lane)	6.75m (2-lane) 10.0m (3-lane)	1.8m
Local Distributor Road ⁺	7.3m (2-lane) 10.3m (2-lane) * 13.5m (4-lane)	6.75m (2-lane)	1.8m
Rural Road A	7.3m (2-lane) 10.3m (2-lane) *	7.3m (2-lane) -	1.8m
Rural Road B	6.75m (2-lane) 10.3m (2-lane) *	7.3m (2-lane) -	1.8m
Feeder Road	6.0m (2-lane)	-	-
Single Track Access Road	3.5m (1-lane) widened to 6m at passing bays 6.0m (2-lane)	-	-

Notes:

- + Where there are tram tracks, a 5.5m wide tram reserve must be allowed for a double track system.
- * When the peak hour traffic volume (two-way) exceeds 1 600 vehicles but is less than 2 400 vehicles, a wider 2-lane single carriageway should be used. The use of a 3-lane single carriageway is not recommended for safety reasons.
- # Recommended minimum Central Reserve width for Rural Roads.

3. The minimum width standards for through zone, street furniture and greening zone as well as building frontage zone of a footpath/walkway on public roads for various land uses is shown in the table below. The width should be flexibly applied to suit individual circumstance or design.

Land Use Type	Through Zone Width / Peak Pedestrian Volume (Pedestrians per minute)	Street Furniture and Greening Zone Width	Building Frontage Zone Width
Commercial Commercial / Residential Residential Zone 1 and those other areas near pedestrian generators such as cinemas, rail stations, some GIC facilities (e.g. schools), etc.	4.5m Very high (Over 100)	1.5m ⁽²⁾⁻⁽⁴⁾	0.5m for dead areas and increase to 1m for shopping frontages
Residential Zone 1	3.5m High (80 - 100)		
Residential Zone 2	2.75m Medium (60 - 80)		
Residential Zone 3	2.0m Low (Below 60)		
Rural	2.0m Very Low		
Business	4.5m Medium (80)		
General Industrial Use ⁽¹⁾	4.5m Medium	4m ⁽³⁾⁻⁽⁴⁾	
Special Industrial Use ⁽¹⁾	3.5m Low to Medium	2m ⁽²⁾⁻⁽⁴⁾	
Rural Based Industrial Use	2.5m Low	1.5m ⁽²⁾⁻⁽⁴⁾	

Notes: (1) For classification of industrial use, please refer to Chapter 5 of the HKPSG.

(2) The SF&GZ width should be increased to 3m for planting of large trees or understorey planting along boulevards or main roads.

(3) If bus shelter exceeding 1m width is provided along the footpath corridor, additional width of up to 2m should be suitably allowed in the SF&GZ.

(4) When street furniture exceeding normal object width of 1m (such as gateway and artwork) is required, the SF&GZ would need to be widened to cater for its provision.

4. Parking Standards for various types of development are summarised in the following tables : (In all cases, the level of provision in a development is to be decided by the Authority. The Standards serve to provide a guideline on which the Authority will base the decision.)

Table 1 : Residential Development

Type of Development	Parking Requirements	Loading/Unloading Requirements
Subsidised Housing #	<p><u>Private car</u> :</p> <p>Parking Requirement = Global Parking Standard (GPS) x Demand Adjustment Ratio (R1) x Accessibility Adjustment Ratio (R2)</p> <p>Where:</p> <p>GPS = 1 car space per 4 - 7 flats R1= 0.52 R2 = 0.85 (within a 500m - radius of rail station); or =1 (outside a 500m - radius of rail station)</p> <p><u>Light Goods Vehicle and Light Bus</u>:</p> <p>1 “shared-use” LGV and Light Bus space per 260 flats</p> <p><u>Medium/Heavy Goods Vehicle, Coach/Bus</u> :</p> <p>To utilise loading/unloading bays at estate commercial centres and around residential blocks for overnight parking in estates</p>	<p>Provision of minimum 2 “shared-use” coaches/buses and M/HGV loading/unloading bays around each residential block for service vehicles and overnight parking</p>
Private Housing	<p><u>Private car</u> :</p> <p>Parking Requirement = Global Parking Standard (GPS) x Demand Adjustment Ratio (R1) x Accessibility Adjustment Ratio (R2) x Development Intensity Adjustment Ratio (R3)</p> <p>Where:</p> <p>GPS = 1 car space per 4 - 7 flats</p> <p>R1= 0.5 (flat size (GFA) ≤ 40m²); or = 1.2 (40 < flat size ≤ 70m²); or = 2.4 (70 < flat size ≤ 100m²); or = 4.1 (100 < flat size ≤ 130m²); or = 5.5 (130 < flat size ≤ 160m²); or = 7.0 (flat size > 160m²)</p> <p>R2 = 0.75 (within a 500m - radius of rail station); or = 1.00 (outside a 500m - radius of rail station)</p> <p>R3 = 1.30 (0.00 < Domestic Plot Ratio ≤ 1.00); or = 1.10 (1.00 < Domestic Plot Ratio ≤ 2.00); or = 1.00 (2.00 < Domestic Plot Ratio ≤ 5.00); or = 0.90 (5.00 < Domestic Plot Ratio ≤ 8.00); or = 0.75 (Domestic Plot Ratio > 8.00)</p>	<p>Minimum of 1 loading/unloading bay for goods vehicles within the site for every 800 flats or part thereof, subject to a minimum of 1 bay for each housing block or as determined by the Authority</p> <p>Space should also be provided around each block for service vehicles</p>

Table 1 (cont'd)

Village Housing	Up to 1 car parking space for each standard New Territories Exempted House (65m ²), with 10 - 15% of provision for overnight goods vehicles	
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The parking standards for subsidised housing in Section 1 of Table 11 are applicable to both public rental housing and subsidised sale flats developments. For public rental housing developments with large site area and subsidised sale flats developments, GPS towards the upper end (i.e. 1 car space per 4 flats) should be considered, while the lower end (i.e. 1 car space per 7 flats) of the GPS should be considered for small sites or sites with severe constraints. A mid-range standard should be adopted for sites with housing type yet to be determined. The L/UL standard including the overnight parking requirement should be applied with due consideration of the site constraint and local situation.

Table 2 : Education Facilities

Type of Development	Parking Requirements	Loading/Unloading Requirements
Primary Schools	1 car parking space for every 4 to 6 classrooms	1 lay-by for taxis and private cars for every 2 to 3 classrooms and a minimum of 3 lay-bys within the school boundary for school buses
Secondary Schools and Technical Institutes	1 car parking space for every 3 to 4 classrooms	1 lay-by for taxis and private cars for every 3 to 5 classrooms in secondary schools and technical institutes and a maximum of 3 lay-bys for school buses
Special Schools	1 car parking space for every 4 to 8 classrooms	1 lay-by for taxis and private cars for every 2-3 classrooms and a minimum of 3 lay-bys for school buses (within the site)
Kindergartens	0 - 1 car parking space per 4 to 6 classrooms	1 lay-by for taxis and private cars for every 5 - 8 classrooms and a minimum of 2 lay-bys for school buses (Note: The requirement may be substituted by 5 lay-bys of size 3m x 7m for mini-bus/nanny van which can provide a total number of seats equivalent to that provided by 2 large school buses)
Tertiary Institutions	No set standard. To be determined by the Authority.	

Table 3 : Medical Facilities

Type of Development	Parking Requirements	Loading/Unloading Requirements
Clinics and Polyclinics	<p>1 to 1.5 car parking spaces for each consulting room. 3 additional parking spaces (9m x 3m) for ambulances for polyclinics</p> <p>1 to 2 car parking spaces should be reserved for disabled person</p>	<p>1 to 2 lay-bys (9m x 3m) for ambulances and 0 to 1 taxi/private car lay-by per consulting room to be provided under cover</p> <p>1 to 2 lay-bys for M/HGVs</p>
Hospitals	<p>1 car parking space for every 3 to 12 beds. 2 - 5 spaces should be allocated for disabled visitor parking. 8 additional parking spaces (9m x 3m) for ambulances for hospitals with Accident and Emergency (A+E) departments. For hospitals without A+E departments, 3 additional parking spaces (9m x 3m) for ambulances</p>	<p>1 lay-by for taxis and private cars to be provided under cover for every :</p> <ul style="list-style-type: none"> (i) 80 beds, or part thereof, in hospitals with A+E departments; (ii) 160 beds, or part thereof, in hospitals without A+E departments <p>1 lay-by (8m x 3m) for PLBs for every:</p> <ul style="list-style-type: none"> (i) 200 beds, or part thereof, in hospitals with A+E departments; (ii) 400 beds, or part thereof, in hospitals, without A+E departments <p>Ambulance lay-bys:</p> <ul style="list-style-type: none"> (i) 2 for hospitals with A+E departments (ii) 1 to 2 for hospitals without A+E departments (iii) all lay-bys to be under cover <p>1 to 3 lay-bys for M/HGVs</p>

Table 4 : Retail Facilities

Type of Development	Parking Requirements	Loading/Unloading Requirements
Retail	1 car space per 150 - 300m ² GFA	1 loading/unloading bay for good vehicles for every 800 to 1 200m ² or part thereof, of gross floor area
Retail Markets	Generally nil	<p>1 M/HGV bay per 20 - 30 large stalls</p> <p>1 M/HGV bay per 40 - 60 small stalls (Subject to a minimum provision of 2 M/HGV bays)</p> <p>1 loading/unloading bay as those for a M/HGV, for each refuse collection point</p>

Table 5 : Commercial Facilities

Type of Development	Parking Requirements	Loading/Unloading Requirements																
Office	<p>For the first 15 000m² GFA : 1 car space per 150 - 200m² GFA</p> <p>Above 15 000m² GFA : 1 car space per 200 - 300m² GFA</p>	<p>1 loading/unloading bay for goods vehicles for every 2 000 to 3 000m², or part thereof, of gross floor area</p> <p>For sites of at least 5 000m² net site area, 1 picking up/setting down lay-by for taxis and private cars for every 20 000m², or part thereof, of gross floor area</p>																
<p>Hotels</p> <p>(a) Main Urban Areas & New Towns</p>	<p>1 car space per 100 rooms</p> <p>0.5 - 1 car space per 200m² GFA of conference and banquet facilities in hotels</p>	<p>0.5 - 1 goods vehicle bay for every 100 rooms</p> <p>Lay-by for taxi and private cars :</p> <table border="1"> <thead> <tr> <th>Hotel Type</th> <th>Minimum No.</th> </tr> </thead> <tbody> <tr> <td>≤299 rooms</td> <td>2</td> </tr> <tr> <td>300 - 599 rooms</td> <td>3</td> </tr> <tr> <td>≥ 600 rooms</td> <td>4</td> </tr> </tbody> </table> <p>Lay-by for single-deck tour buses:</p> <table border="1"> <thead> <tr> <th>Hotel Type</th> <th>Minimum No.</th> </tr> </thead> <tbody> <tr> <td>≤299 rooms</td> <td>1</td> </tr> <tr> <td>300 - 899 rooms</td> <td>2-3</td> </tr> <tr> <td>≥900 rooms</td> <td>3</td> </tr> </tbody> </table> <p>Additional provision for convention centres and banquet facilities to be determined by the Authority</p>	Hotel Type	Minimum No.	≤299 rooms	2	300 - 599 rooms	3	≥ 600 rooms	4	Hotel Type	Minimum No.	≤299 rooms	1	300 - 899 rooms	2-3	≥900 rooms	3
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Table 5 (cont'd)

Type of Development	Parking Requirements	Loading/Unloading Requirements
(b) Other areas	<p>Not less than 1 single-deck tour bus parking space for every 200 guest rooms or part thereof</p> <p>Not less than 1 car parking space for every 10 guest rooms</p> <p>2 - 5 car spaces per 200m² GFA of conference and banquet facilities in hotels</p>	<p>Not less than 1 bay for goods vehicles for every 100 guest rooms or part thereof.</p> <p>Additional provision for convention centres and banquet facilities to be determined by the Authority</p>
Commercial / Entertainment Facilities (e.g. cinemas, theatres)	Range of 0 to 1 car parking space for every 20 seats or part thereof	<p>Except for cinemas, 1 loading/unloading bay for goods vehicles where practicable</p> <p>Not less than 1 picking up/setting down lay-by for taxis and private cars for every 400 seats or part thereof</p>

Table 6 : Industrial Development

Type of Development	Parking Requirements	Loading/Unloading Requirements
Industrial Use	1 car space per 1 000 - 1 200m ² GFA	<p>1 goods vehicle bay per 700 - 900m² GFA, 50% of which should be for parking of goods vehicles</p> <p>1 container vehicle loading/unloading bay with turning circle of 11.6m outer radius should be provided for a site with dimensions not less than 45m x 40m</p>
Industry/Office (I/O) Uses	1 car space per 600 - 750m ² GFA	<p>1 goods vehicle bay per 1 000 - 1 200m² of 50% of the I/O GFA; and 1 per 2 000 - 3 000m² of the remaining 50% of the I/O GFA</p> <p>50% of all the above required goods vehicle bays shall be for parking of goods vehicles</p> <p>1 goods vehicle bay per 800 - 1 200m² for commercial GFA solely for loading/unloading</p> <p>1 container vehicle loading/unloading bay with turning circle of 11.6m outer radius should be provided for a site with dimensions not less than 45m x 40m</p>

Type of Development	Parking Requirements	Loading/Unloading Requirements
	<p><u>Office Buildings:</u></p> <p>1 car space per 150 - 200m² GFA for the first 15 000m² GFA; 1 car space per 200 - 300m² GFA for the remaining GFA</p> <p><u>Business Buildings:</u></p> <p>1 car space per 200 - 300m² GFA</p>	<p>1 goods vehicle bay per 2 000 - 3 000m², or part thereof, GFA</p> <p>For sites of at least 5 000m² net site area, 1 picking up/setting down lay-by for taxis and private cars for every 20 000m², or part thereof, GFA</p> <p>1 goods vehicle bay per 800 - 1 200m² GFA, 50% of which should be for parking of goods vehicles</p> <p>A minimum of 1 picking up/setting down lay-by for taxis and private cars shall be provided for sites of at least 5 000m² net site area</p> <p>1 container vehicle loading/unloading bay with turning circle of 11.6m outer radius should be provided for a site with dimensions not less than 45m x 40m</p>
Industrial Estate	1 parking space per 900m ² GFA or 1 parking space per 450m ² site area, whichever is the greater. Of the spaces provided, 50% shall be for parking of private cars and light vans and 50% shall be for parking and loading/unloading of lorries.	One half of spaces set aside for lorries should be able to be used for loading/unloading. One container vehicle bay on sites with dimensions of not less than 45m x 40m
Science Park	1 parking space per 75m ² GFA (75% for cars; 25% for vans) 1 lorry parking space per 5 000m ² GFA	One half of spaces set aside for lorries should be able to be used for loading/unloading

Type of Development	Parking Requirements	Loading/Unloading Requirements
Rural Based Industrial Use	1 parking space per establishment or 1 parking space for every 900m ² GFA of the establishment, whichever is the greater, for lorry/visitor parking	One half of spaces set aside for lorries should be able to be used for loading/unloading
Other Industrial Uses with Special Requirements	As per functional needs	

Table 7 : Other Facilities

Type of Development	Parking Requirements	Loading/Unloading Requirements
Churches	Up to 1 car parking space for every 16 seats or equivalent	1-2 bays (9m x 3m) for small coaches
Electric Substations		
(a) 66kV and above sub-station	One space for private car	One M/HGV space
(b) 33kV substation	One space for private car	One LGV space
Art Venues	No set standard. To be determined by the Authority.	

5. The dimensions of parking spaces and loading/unloading bays are set down below :

Types of Parking Space and Loading/Unloading Bay	Length (m)	Width (m)	Minimum Headroom (m)
Private Cars, Van-type Light Goods Vehicles and Taxis	5	2.5	2.4
Light Goods Vehicles (LGV)	7	3.5	3.6
Medium/Heavy Goods Vehicles (M/HGV)	11	3.5	4.7
Container Vehicles	16	3.5	4.7
Coaches/Buses	12	3.5	3.8
Light buses	8	3.0	3.3
“Shared-use” for LGV and Light buses	8	3.5	3.6
“Shared-use” for Coaches/buses and M/HGV	12	3.5	4.7