



بلدية رأس الخيمة
Ras Al Khaimah Municipality

حكومت رأس الخيمة
Government of Ras Al Khaimah

لائحة شروط و مواصفات البناء بإمارة رأس الخيمة

Building Regulations and Specifications in the Emirate of Ras Al Khaimah

الاشتراطات المعمارية
Architecture Requirments

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Resolution No. () For 2023

Regarding Building Regulations and Specifications in the Emirate of Ras Al Khaimah

Director-General of Ras Al Khaimah Municipality Department

Having considered Ras Al Khaimah Municipality Law of 1981;

Law No.2 of 2007 regarding the establishment of Ras Al Khaimah environment protection and development authority; and its amendments;

Law No. 11 of 2008 regarding advertising inspection;

Law No. 1 of 2009 regarding regulating buildings in Ras Al Khaimah;

Law No. 3 of 2017 regarding the establishment of Public Services Department;

Law No. 3 of 2018 regarding the occupancy of sidewalks and outdoor spaces;

Resolution No. 18 of 2018 regarding building regulations and construction specifications in the emirate of Ras Al Khaimah;

Law No. 8 of 2019 regarding regulating contracting profession in Ras Al Khaimah;

Law No. 10 of 2019 regarding regulating engineering consultancy practices in Ras Al Khaimah;

Have issued the following:

Article (1): Definitions

The following regulations and specifications provided consists of words and expressions that emphasizes the following meanings unless the context of the text indicates otherwise:

Emirate	Emirate of Ras Al Khaimah
Department/Municipality	Ras Al Khaimah Municipality Department.
Director-General	General Manager of the Municipality Department.
Executive Director	Executive Director of Urban Planning and Development Sector.
Council	Municipal Council.
Competent Department	Building Administration
Concerned Department	The department that is responsible for providing technical opinion on a specific issue or matter.
Relevant Entity	It is a local or federal government entity or institution that is required to approve a matter within its specialization.
Services Departments	Competent services departments in Ras Al Khaimah includes: <ul style="list-style-type: none"> ▪ Eithad Water and Electricity 'EithadWE'. ▪ Emirates Telecommunications Corporation 'Etisalat' . ▪ Public Services Department. ▪ RAK Civil Defense.

	<ul style="list-style-type: none"> ▪ Any other department specialized in utilities and services.
Owner	A person where a land or a building is registered under his name.
Engineer (Consultant)	A person that is responsible of design or supervision tasks of construction works or both, and who is licensed to practice the profession of engineering consultancy in the Emirate.
Contractor	A person assigned to carry out the construction works and licensed to practice building contracting activities in the Emirate.
Inspector	A person that is assigned to specific tasks such as describing the plot status, its buildings, contents, and uses by the Competent Department.
People of Determination	A person that suffers from permanent or temporary deficiency or imbalance in his physical, sensory, mental, communicative, educational or psychological capabilities to the extent that it limits his/her possibility of meeting the normal requirements.
Technical Committee	The committee that is formed within the Competent Department due to the request of the Director-General of the Municipality to study building permit cases and its related issues and take appropriate decisions regarding it. Refer to Article (53) of this regulation for more clarification about its responsibilities.
Special Approvals	Some exceptions issued by the Director-General regarding some rules of this regulations, planning legislation, or other legislation related to construction works.
Building Permit	The permit issued by Building Department to authorize the construction work to be performed on a specific plot in accordance with the approved plans, specifications and conditions.
Plot/Parcel	An area of land defined by its boundaries, neighbor, unique plot number, location, and that is designated for construction in accordance to documents such as permits, approved drawings, etc.
Plot Limit	The limit separating the plot of land from any other property.
Plot Area	The total area of the plot that is confined between its boundary lines.
Plot Front Limit	The boundary limit of the plot overlooking the street, according to the Land Use Classification approved by the Concerned Department.
Plot Side Limit	Any boundary limit related to the plot other than the front or back line
Plot Back Limit	The plot limit that is opposite to the front line and that is located at its farthest distance from it.
Road (Street)	A street that is open to the public traffic without a special permission.

Right of Way (R.O.W)	The distance between two opposite building lines according to the approved masterplan by the Concerned Department.
Center-Line	The longitudinal center line of the road or sikka approved by the Municipality.
Sikka	It represents corridors that separate neighboring residential building, or residential plots, and public utilities. Such corridors are used as pedestrian paths, service lines, and car passage.
Neighbor	Any neighboring plot with a specific number except streets and sikkas. It includes all neighbor from sika or open areas except streets.
Other Boundaries	It includes all neighbor from sika or open areas except streets.
Boundary Wall	A permanent barriers that aims to surround a plot for privacy or for any other approved purpose.
Fence	A temporary barrier made of light construction materials aims to surround a plot for an approved purpose.
Main Gate	The main entrance to the plot, which can be covered or uncovered, and it is designated for cars entrance.
Secondary Gate	It is a plot secondary entrance, that can be covered or uncovered, and is intended for the entry of people (pedestrian) only.
Building	Any construction work built on a fixed location on the plot, using a group of approved materials, including the foundation, walls, roofs, projections, boundary walls, etc.
Temporary Building	Any construction work that can be removed after the expiration of a specified period, and that is built from approved material by the Concerned Department.
Main Building	The building that includes the main function within the specified plot.
Heritage Buildings	They are buildings that contain historical and heritage architectural elements for which demolition, construction, or modification work is not permitted without the preliminary approval of the Concerned Authority.
Commercial Buildings	Buildings that permitted as for commercial use according to land use classification & legalization system.
Residential-Commercial Buildings	It is a multi-story building where the ground floor is designated for commercial and residential use and the repeated floors are designated for residential or office use.
Investment- Residential Buildings	Buildings designated for residential use only.

Assigned Land use	Any plot/building use permitted in a region according to land use classification and legalization System in the Emirate.
Main Land use	The main use of the building is based on the land use classification and legalization system in the Emirate or according to the exceptions issued for any plot.
Secondary Use	It includes buildings built on the same plot with the main buildings. It includes service blocks such maid’s room, garage, etc.
Commercial Center /Shopping Malls	A group of shops, showrooms, or spaces used for commercial purposes that are open to covered and air-conditioned internal squares or corridors.
Showroom	A relatively large space allocated for practicing a commercial activity such as displaying goods for the purpose of selling them.
Shop	Any space designated for practicing a commercial activity such as displaying goods for the purpose of selling them.
Hotel Facility	Hotel - Resort - Hotel Apartments - Motels - Chalets and Rest Areas.
Hotel	Facilities specialized in providing accommodation services to guests on a daily or weekly basis in furnished rooms and suites with all the needs of maintenance, providing food and beverages, laundry, car parking, sports and entertainment facilities, provision of swimming pools, and meeting and conference rooms.
Resort	It includes specialized facilities built in tourist places such as seashore, mountainous, or desert area, etc., providing short temporary stays in buildings (chalet or apartments) that provide all hotel services and against a specific daily rate.
Hotel Apartments	Facilities consisting of residential apartments equipped with all the necessary living facilities. They are rented for permanent residence, for daily, monthly or annual rent.
Motels	Facilities that provide suitable accommodation for their guest, excluding the usual services provided in hotels. They are rented for a temporary period against daily rent with specific prices.
Chalets and Rest House	Hotel facilities that equip chalets, cottages, cabins and rest areas and provide them with all equipment necessary to stay in them for temporary periods and may provide other services such as other common hotel services.
Private Villa	A separate or semi-detached building dedicated to all its floors for the accommodation of one family only. It has a ground entrance and includes at least three living spaces, a hall and their services. It is considered the

	main building in the residential plot and has a separate car park in addition to independent outdoor spaces.
Service Block	A building attached to or detached from the main villa and its used as a secondary building to the use of the main building.
Investment Villas	A complex of private villas connected or semi-connected to each other, for rent or investment, and outdoor spaces and recreational services may be shared.
Staff Accommodation	A building used as a place for collective accommodation for a number of people who belong to a specific entity (university, boarding school, hospital, company).
Labor Accommodation	A building used for collective accommodation for workers.
Residential Apartment	It is a part of a residential building that consists of one or more room with a lobby designed to accommodate several people. Moreover, it consists of a kitchen and at least one bathroom. This forms one rental unit.
Studio	It is a part of a residential buildings that consists of a room, pantry, and bathroom. It forms one rental unit.
Office	A space designated for practicing office activity.
Kitchen	An enclosed space dedicated to make and prepare food and beverages.
Open Kitchen	An open space intended for the purposes of making and preparing food and beverages.
Pantry/Preparatory kitchen	A place to prepare food and drinks (snacks) which is not a substitute to the main kitchen in the residential units.
Guard Room	A room, unit, or residential space to be built on the same plot on which the main building is located, or located within the building. It is designed for the accommodation of the guard and includes a bathroom. It is allowed to be attached on the main wall.
Maid Room(s)	It is a room that can be attached or independent from the main building within the same plot and designated for the accommodation of the maid of the building's occupants.
Store	A part of a building that is covered and used to store things.
Car Parking	A building designated for car parking, which can be with or without a roof.
Arcades (Liwan/ Riwaq)	A continuous roofed corridor to any building, open to a street or an open courtyard or linking more than one building and including external columns towards the street or the courtyard.
Iwan	A deep space, surrounded by walls on three sides, and open on one side towards the outside air.

Canopy	It is a projected cover from the wall of a building or a cover supported by columns, aiming to protect doorways, windows, or corridors from rain or sunlight.
Larache (Pergolas)	Canopies with a non-solid roof have openings and are usually built for architectural or climatic purposes.
Veranda	A roofed part outside of the building that overlooks its surroundings and is sometimes used as an entrance to the main door of the building.
Staircase	It is a part of the building inside which the stairs are located, and it is closed with a door.
Waste Collection Room	A space utilized for temporary storage of waste for its transportation outside the building for disposal.
Waste Room (Garbage Room)	In case, typical floors exceed three floors above the ground floor, a waste room exists in each typical floor and includes waste dumping openings that is connected to a waste pipe to dump wastage in the collection room in the ground floor. In case of small plots, the wastage is dumped in a room in each floor instead of a waste pipe.
Balconies	Covered or uncovered projections from the external walls of the building and are accessed from the building itself.
Ornamental /Decorative Elements	They are the elements that are added to the building to achieve aesthetic, expressive or symbolic purposes.
Lighting And Ventilation Openings	An opening that provides lighting or natural ventilation, or both, for any facility in the building, and is located on any ceiling or external wall.
Secondary Ventilation (Cross Ventilation)	It is the ventilation that is provided through an opening or a courtyard for rooms that are more than three times their width, in order to provide ventilation and natural light to the internal parts of them.
Internal Courtyard	It is a space (void) connected to the outdoor air from above and surrounded by buildings on three or more sides and overlooked by rooms of one or more residential or office units.
Outdoor Courtyard (Pocket patio)	It is a patio or an inner courtyard opened towards a sikka or a street.
Patio (Shaft)	It is a space connected to the outdoor air from above and surrounded by buildings on three or more sides and overlooked by utility facilities only.
Utility Shaft (Duct)	An enclosed duct through which the utility pipes pass and it has access openings for maintenance.
Built – Up Ratio	The ratio of building area over plot area.

Setback	The horizontal distance between any front, side or rear plot limit and the nearest wall or (utilized) projection of the building.
Building Projection	A part of a building that extends from the floor slab that it is located on. This project may start from the mezzanine, or first floor, etc.
Building Height	The vertical distance measured from the approved design level to the highest point in the building, and includes the roof parapet, or the staircase room ceiling, or mechanical equipment or utilities on the roof floor.
Floor Area	Total covered area in the building is measured between the external surfaces of the building boundaries including porches, balconies, projections, and any covered spaces with approved material such as reinforced concrete or similar. Covered spaces includes covered car parking, corridors, courtyards, loading/unloading locations, swimming pools, and utility floors.
Net Area	The area utilized by the building without calculating the area of services, such as corridors, distribution halls, stairs, walls, elevators, toilets, etc.
Floor	It is a part of a building that is located between the finish floor level of any floor and the finish floor level directly above it.
Basement Floor	A building floor where half of its height is under the approved design level. Otherwise, it is considered a ground floor if its slab height is more than (1.50) m from the approved design level, and its height and area calculation must follow the ground floor requirements.
Ground Floor	It is the first floor in the building and its finish floor level is higher than the approved design level.
Mezzanine Floor	A partial or full floor that is located between the ground floor and the first floor, and its use is either dependent on the ground floor, or it can be independent and used separately offices or services.
Typical Floor	It is a floor that is similar to other floors and is usually located above the ground floor.
Last Floor	It is the last floor in the building according to the heights specified in the land Use map Classification and Codification System in the Emirate or the special approved cases, and it is located directly below the roof floor.
Roof Floor	It is the final floor of the building and is usually used for elevator machine rooms, stairs, mechanical and electrical service rooms, water tanks, pergolas, swimming pools, gym, and their related services.

Mechanical Services Floor	It is the floor that is completely devoted to the placement of electrical and mechanical devices and equipment for the building. It is designed in a way that it suits the purpose of its use only and not permitted to use it for other purposes. This floor should subject to a technical committee approval.
Floor Hight	The distance from finish floor level until the finish floor level of the next floor.
Net Floor Height	The clear distance between finish floor level and the bottom of the structural roof slab.
Ground Surface Level	The level measured from the point of intersection of midpoint of external building walls with the ground surface.
Floor Level	The height of the finish floor level of the floor from the approved design level.
Bench Mark	It is a mark that is fixed on a fixed non-moving part, where it represents a known point of coordinates according to the survey reference of the Emirate and the coordinate system adopted. Benchmark is used to determine the locations and levels of other points on site or maps.
Design level	It is a value representing the height of a point on maps, leveled to a reference level (average sea level) according to the Emirate's vertical reference.
Approved Design Level	It is a design level that is usually specified for the main gate at plot entrance towards the street side according to the survey reference in the Emirate. As a result, all different levels of the building are specified according to it.
Excavation Level	It is the average levels of flat ground points that represents the level on which the foundations of the facility constructed.
Parapet	A wall or barrier of any approved material by the Concerned Department around the perimeter of the building surface for the purpose of public safety and protection, and sometimes to hide the equipment and air-conditioning equipment or any other equipment.
Advertisement Sign Board/ Billboard	Any definition, description, drawing, or any other means that is installed, written or drawn, directly or indirectly, on any building, facility or plot for the purpose of drawing attention to any activity, products, etc.
References and Standards	The technical references and specifications needed by the consultant, contractor, laboratory technician, and everyone who have the responsibility of design, implementation and testing of building materials and Elements. Moreover, it represents any other international standards approved by the department.

Article (2): Scope of Application

The provision of this regulation, conditions, standard specifications "codes", and referred references shall be applied to all construction works and buildings in the emirate.

Article (3): Interpretation of Regulations

When any dispute occurs about the interpretation of any of the technical items mentioned in this regulation, or the existence of unclear specifications or standards, the technical interpretation issued by the Competent Department through the technical committee is considered the approved interpretation of this item or specification.

Architectural Requirements

Article (4): Planning Determinants

No building is permitted to be built on any plot unless it conforms to the planning requirements issued by the Concerned Department. In light of these requirements, the number of floors that make up the building, the permitted height, the type of intended use for it, external setbacks, the required parking lots, the building percentage and the floor ratio in it are also determined.

Article (5): Areas

The area of all the covered parts is calculated on each floor regardless the use under the floor slab. The area is calculated from the outer boundaries of the roof slab of each floor, except for the ground floor area of investment residential buildings and residential commercial buildings, which is calculated on the basis of the outer walls of the ground floor.

First: Residential Buildings Requirements

Article (6) Residential Private Villa

6.1 Built Up Ratio

1. Built up ratio should not exceed (65%) of the plot area, and the remaining (35%) is devoted to open and recreational spaces, such as green areas, entrances, car parks, an uncovered swimming pool, children's play areas, etc. . It is allowable to cover (50%) of these open and recreational areas with open shades that are made of light materials such as a tent, various types of interior shades or a temporary majlis.
2. Built up ratio must not be less than (10%) in the granted plots, except for large plots (> 3600 square meters), so the minimum built up ratio will be (5%) of the area of these plots.

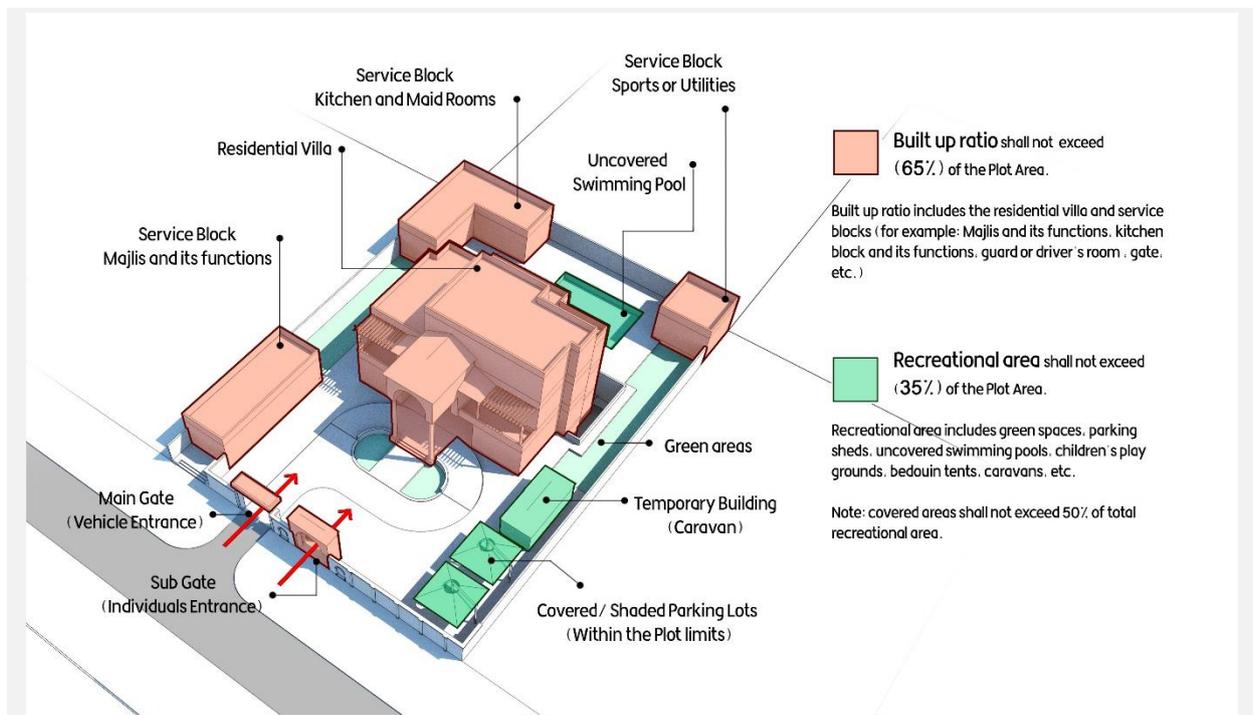


Figure No. (1) Built up ratio of the residential private Plot.

3. Built up ratio includes all the following buildings:
 - a. Residential Villa

It is permitted to build one Residential Villa for each plot, which should include at least three living spaces, a hall and their services. The residential villa is considered the main building in the residential plot. It is not allowable to have multiple Residential Villas within the same plot.

b. Service Block

- Service blocks (Kitchen and its facilities - Maid’s rooms and their facilities - /Laundry - Electricity Room - Store - Utilities Rooms (if any) - Swimming Pool -Pumps Room - GYM - Garage).
- Other service blocks such as majlis.
- Gate service block.
- Guard Room service block and its facilities.

This excludes any uncovered swimming pools, uncovered children’s play area that consists of entertainment facilities, open shades that are made of light materials and with an exception that it doesn’t exceed (50%) of the open area..

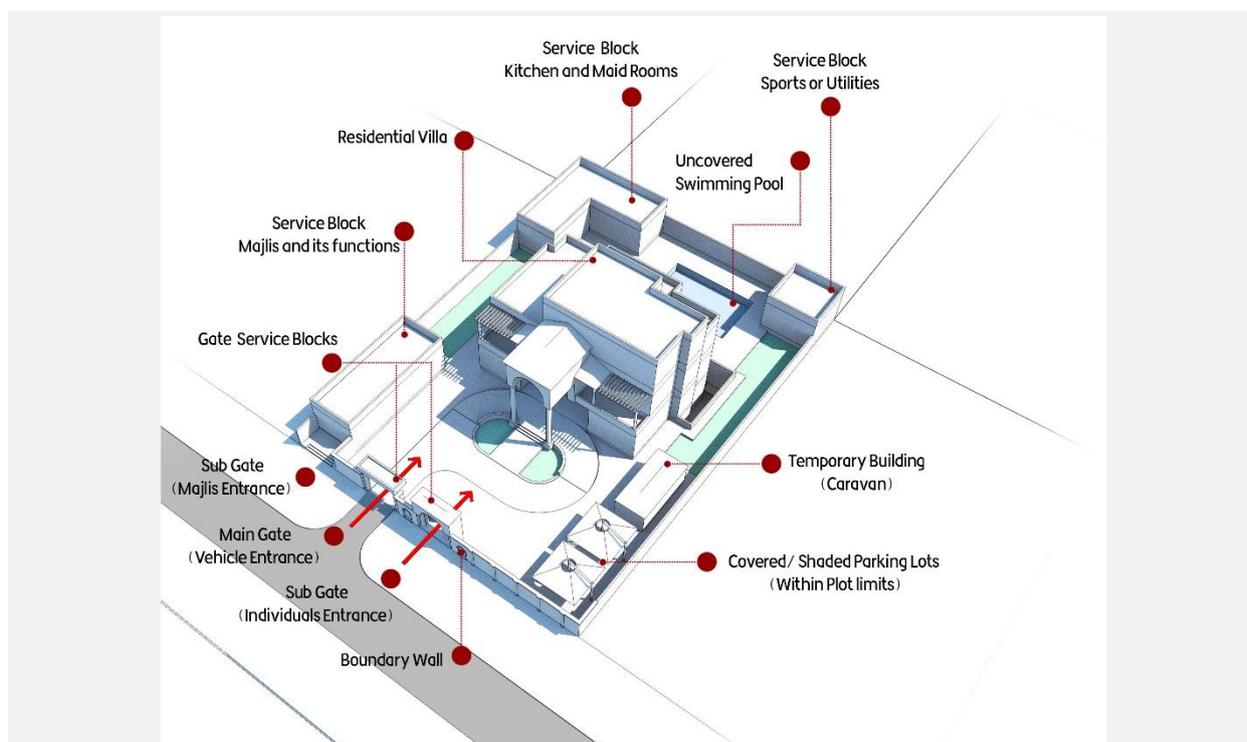


Figure No. (2) Components of residential private plot

6.2 Setbacks

Table No. (1) shows the minimum setbacks for private villas.

Building	Minimum setbacks from plot limit	
	Street	Neighborhood and other Boundaries
1 Residential Villa	(2.00)m	(1.50) m
2 Majlis service block/ Guard service block	N/A	N/A
3 Service Block	-No setbacks if there are no service openings. -Minimum setback is (1.50)m if there are service openings.	

1. The minimum setback for residential villas should be (2.00) meters from the plot limit towards the street side, and not less than (1.50) meters from the neighborhood side and other parcel sides.
2. The internal setbacks between the residential villa and service blocks, or between the service blocks, must not be less than (1.50) m.
3. It is permitted to build the service block on plot limit towards the street side and other sides without any setbacks and homogenously with the boundary wall's design, ensuring that service block doesn't exceed (50%) of the boundary wall's length towards the road.
4. It is not permitted to make service openings (bathrooms, kitchens) and locating air-conditioning equipment on the service block towards the road or sika and should be at a setback not less than (1.50) m from plot limit if not adjacent to the wall.
5. The service blocks should be built as a strip or in the form of letter (L) attached to the boundary wall or with a sufficient setback.
6. It is permitted to build the majlis service block, or guard service block, or garage service block, as a part or as an extension to the villa, on the front side of the plot without any setbacks, taking into consideration the first floor setbacks according to the regulations.
7. In case the service blocks are merged with the villa, setbacks regulations shall be implemented starting with the outer boundaries of the building. In addition, it is permitted to merge the service blocks with the main villa with a covered corridor with a width not exceeding (3.00) m and height not exceeding the service block height.
8. It is not permitted to build any structures within the required setbacks except pergolas and uncovered parking lots.
9. Utility lines should be taken into consideration during the application of setbacks from roads, sikkas, neighborhoods, and other sides. Moreover, structural projections are not permitted if it is outside the plot limit.
10. Setbacks must be adhered to in a manner that does not conflict with the issued planning requirements and land use classification and legalization system in the Emirate.

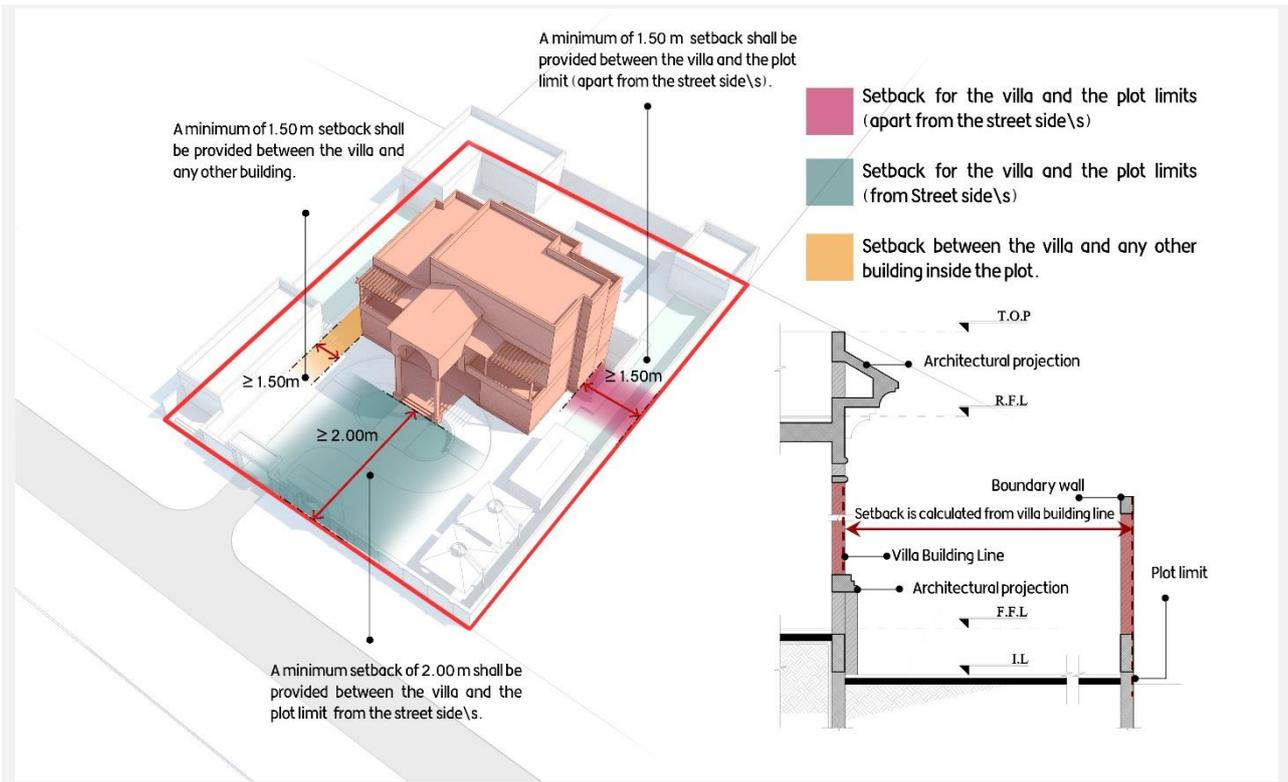


Figure No. (3) Stebacks of residential villa

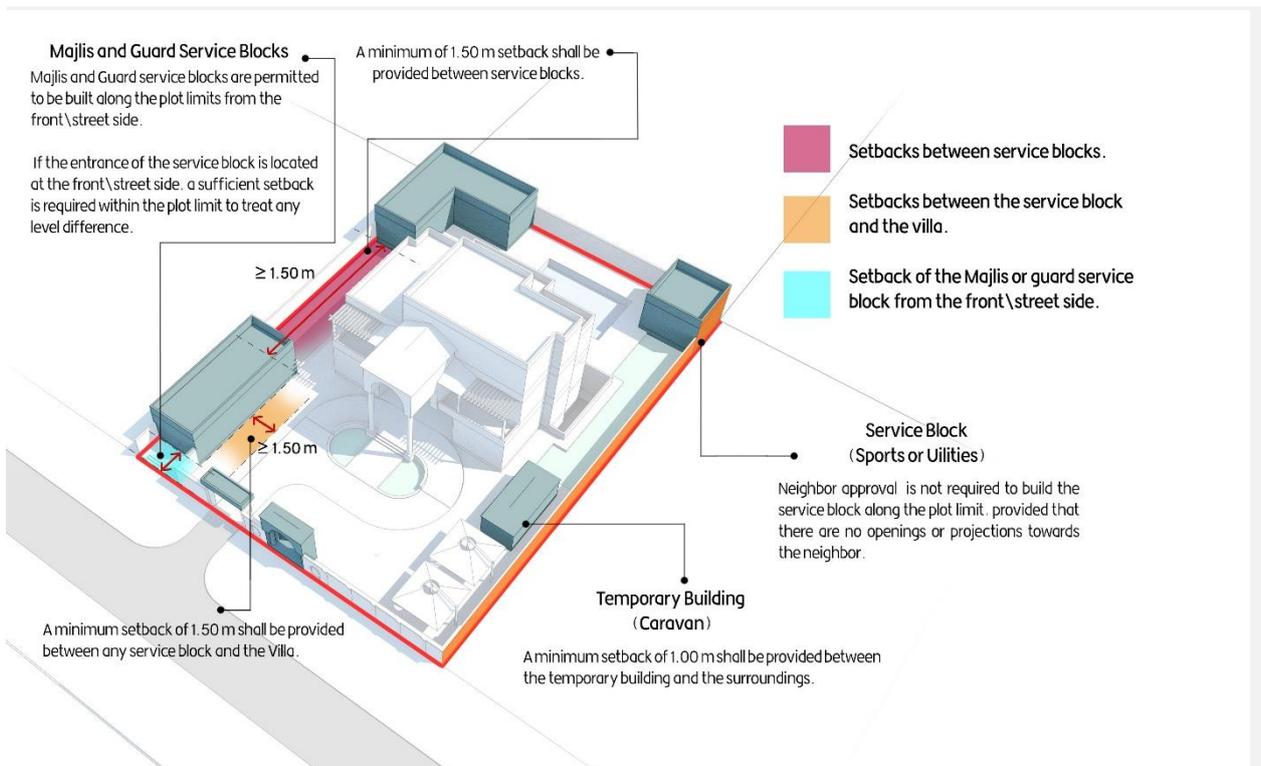


Figure No. (4) Setbacks for service blocks

6.3 Levels, Heights and Number of Floors

1. The ground floor's finish level for residential villas and service blocks should not exceed (1.50) meters from the approved design level towards the road at the main entrance and not less than (0.45) meters from the ground level outside it. The majlis and guard service blocks attached to the boundary wall are allowed to have a ground floor finish level not less than (0.15) m from the sidewalk level outside the plot.
2. If the plot is located on two roads or more with different levels, the excavation level for the service blocks attached to the plot limit should be the lower design level between the adjacent plot (if the difference in the level between the two plots is less than (1.50) m).
3. The residential villa can be permitted as ground floor, first floor, roof floor, and basement floor if exists, however, service blocks are permitted as ground floor and basement floor only if exists.
4. The maximum external height of service blocks should not exceed (6.00) meters from streets, sikkas and neighborhood side.
5. The maximum clear height of the roof floor should be (4.50) m if it is a ground floor villa only, for the possibility to be changed to a first floor in the future.
6. The height of building's parapet should not be less than (1.00) m from the final finishing, and should not exceed (2.00) m except only in cases of enhancing the architectural facades and aesthetics and according to the approval of the Competent Department.
7. The inner clear height of the roof floor is measured from it's floor finish level until the bottom of its roof slab as shown in table No. (2) and figure No. (6).

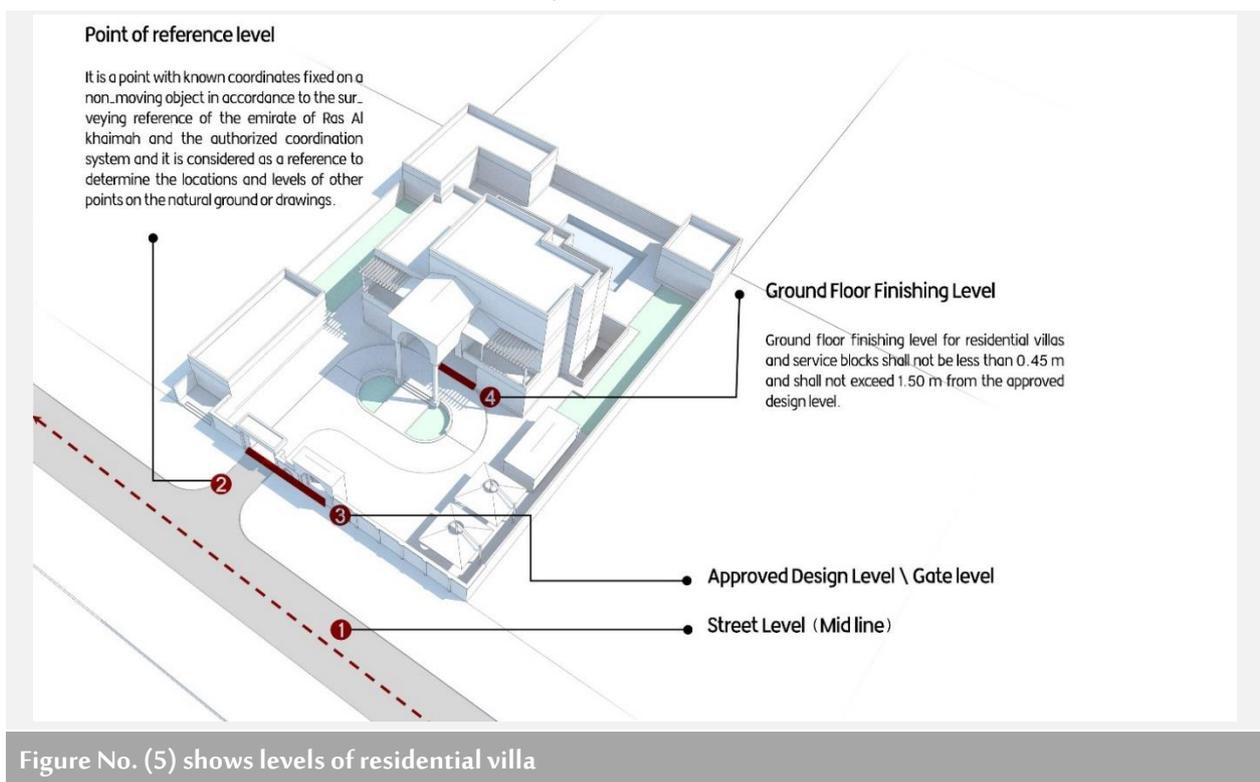


Table No. (2) shows minimum and maximum clear Internal height for residential Uses

	Floor	Minimum Clear Height	Maximum Clear Height
1	Residential floor	(3.00) meters	(4.50) meters
2	Basement floor	(2.70) meters (Clear under the beams and suspended utilities)	(3.50) meters
3	Roof floor	(2.70) meters	(3.50) meters / (4.50) meters for ground floor villa only
4	Net height under the stairs	(2.40) meters if used as an entrance (2.70) meters if used as a usable space	N/A

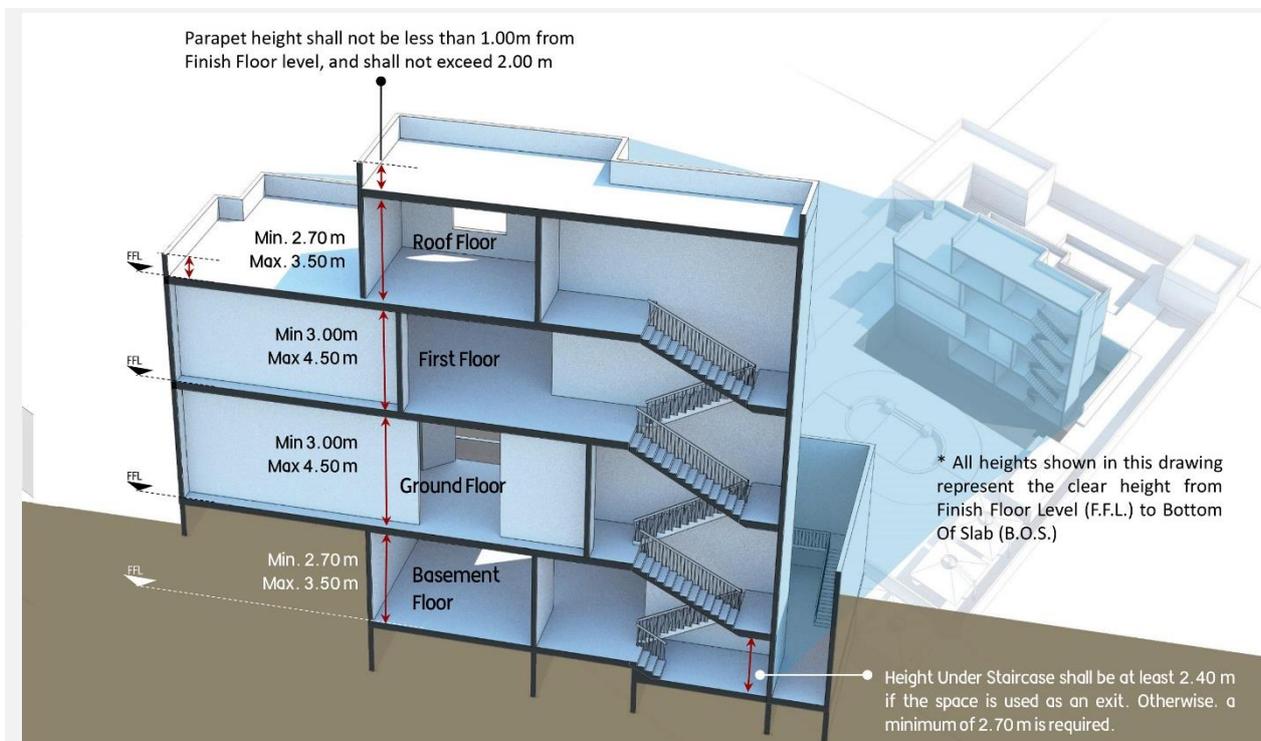


Figure No. (6) shows net heights for residential villa floors.

6.4 Services Blocks

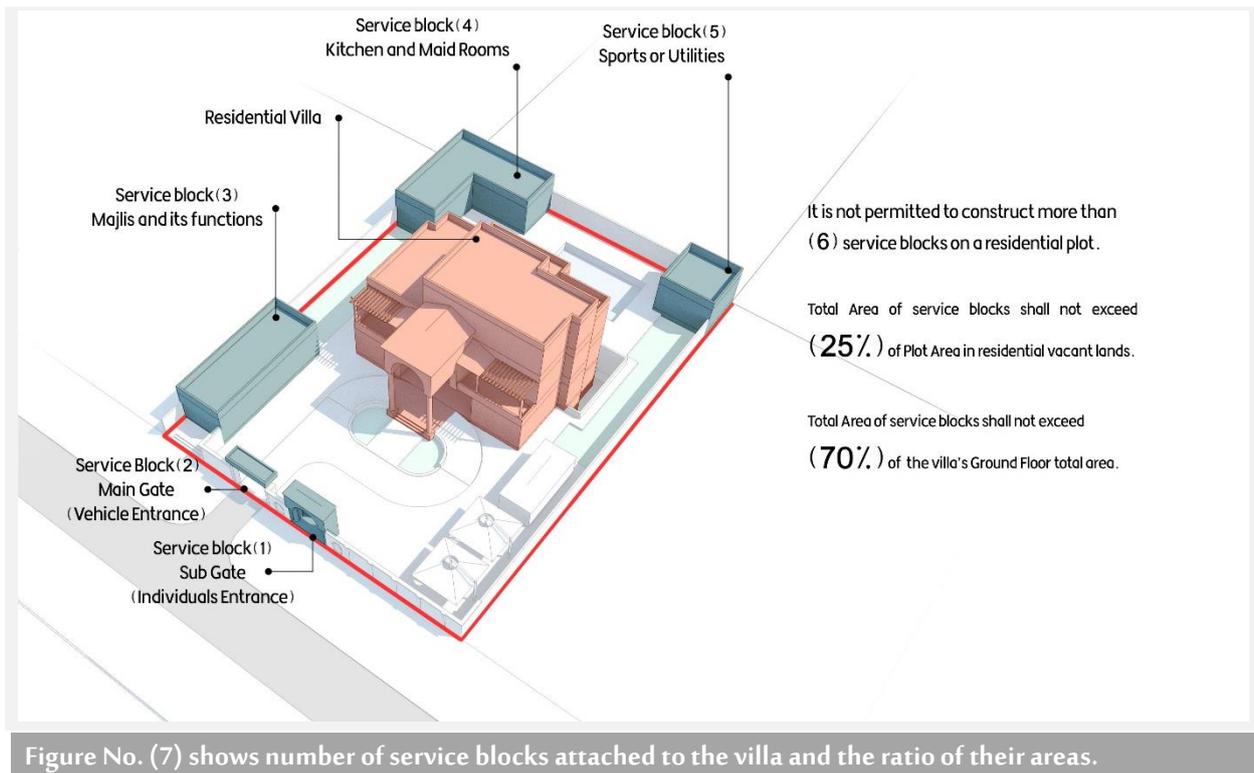
It is permitted to construct additional service blocks with the residential villa with a condition that they do not exceed six service blocks and within the specified built-up ratio for the plot:

1. Majlis service block and its facilities.
2. Kitchen service block and its facilities.
3. Guard/driver room service block .
4. Gate or garage service block.
5. Sports service block and its facilities.

6. Utility service block such as an electric room upon request from the relevant authority or a pool pump room.

Two bedrooms only are permitted within the majlis and kitchen service blocks, in addition to the following considerations:

1. The use of service blocks is limited to service purposes for the residential villa and may not be utilized separately or for commercial use. Moreover, the service blocks' roofs can be used to place water tanks, air-conditioning equipments, etc. , and it is not permitted to make main stairs that lead to the roof of the service blocks that are adjacent to the neighborhood.
2. In case of vacant plots, the area of service blocks shall not exceed (25%) of the plot area.
3. The total service blocks area shall not exceed (70%) of the total ground floor area of the villa.
4. The main distribution element for service spaces should be a corridor, liwan, or lobby.
5. The gate is considered a service block if it is roof covered with a width not less than (1.00)m. If it consists only of aesthetic columns and it not roof covered, then it cannot be considered as service block.
6. It is permitted to build an extension to the first floor as an extension for the residential villa over the adjacent majlis or other service blocks according to the following requirements:
 - It is permitted to make an extension for the villa over the service blocks attached to the Boundry Wall, taking into account the setbacks of the residential villa as shown in Clause (6.2) and Table No. (1).
 - In this case, all approved regulations for the residential villa are applicable for service blocks.
 - The access for the extension or the addition should be through the residential villa only.
7. The sport service block building consists of a gym, bathrooms and changing rooms, where the gym area should not be less than (70%) of the sport service block.



6.5 Basement Floor

1. It is allowable to build one basement floor, with applying the minimum front building line setback for residential villas which is (2.00) meters from the plot limit towards the road side, and not less than (1.50) meters towards the neighborhood and other sides.
2. The basement floor shall not be utilized for housing or living purposes, and it is restricted only to the following purposes:
 - Car parking and building utilities (electrical room, telephone room, water tanks and pump rooms, etc.).
 - Residential use services (Laundry/washing room, swimming pool, fitness and health club/gym and their related services, children's play area, etc.).
3. If there is a kitchen in the basement floor, openings should be provided through acceptable architectural detailing that provides sufficient ventilation and natural lighting through open spaces or yards, where the minimum width is not less than the height of the part that is located below the approved design level.
4. The basement floor should be connected with a stairs from inside the villa or service block and providing at least one external yard for the purpose of fire or emergency exits. If the height of the yard exceeds (1.20)m, the minimum width should not be less than the height of the part that is located below the approved design level for the plot. Moreover, it is compulsory to provide a

secondary emergency exit separated from the main building emergency exit and follow Article No. (38) of this regulation for stairs specifications and requirements.

5. Precautions must be taken to prevent water leakage from the walls or basement floors or rainwater drainage into the basement.
6. The basement floor should not be used separately from the villa, and the general requirements for the basement must be followed according to Article No. (25) of this regulation.
7. The approved regulations in Article No. (30) regarding the width of parking lots, slope and width of the ramps that leads to the basement floor should be applicable if the basement floor or part of it is used as car parking.

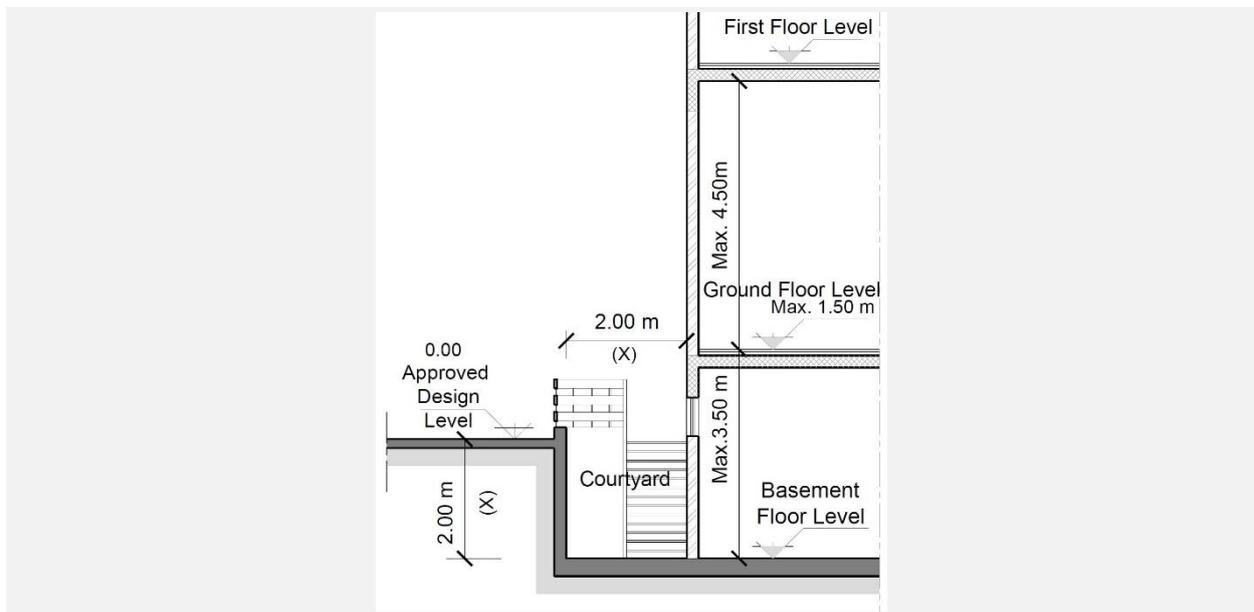


Figure No. (8) Ventilation and emergency requirements for the basement of residential private villas.

6.6 Roof Floor

The following requirements and specifications shall be considered for the roof floor:

1. The roof floor is usually designated for stairs, water tanks, air-conditioning equipment, pump rooms, machine rooms for elevators, electrical rooms, telephone rooms, some aesthetic pergolas, and swimming pools. It is also allowed to establish gym and other service uses approved by the Competent Department.
2. It is permitted to build rooms for residential use within a specified ratio on the roof.
3. The roof floor area should not exceed (50%) of the total first floor area, where this area includes all constructions on the roof floor. Its structure should be reinforced concrete or similar and its setback shall not be less than (1.50) m from front building limit.
4. A closed lobby must be provided in front of the elevator and must be properly enclosed to protect it from rainwater and other various weather conditions.

5. Roof/rain water must not be drained outside the plot limit.
6. Swimming pools are allowed to be built on the roof floor with its pergolas and it is not accounted within the percentage constructed area of the roof if it is not covered. In addition, the swimming pool is excluded from setbacks conditions and ensuring that the height of the swimming pool shall not exceed (2.40) m from roof level. The height of gym and residential spaces shall not exceed (3.50) m.
7. It is not permitted to provide any structures above the roof level or swimming pool level, except elevator room, water tanks, and air conditioning equipment.



Figure No. (9) Construction spaces on floors for residential private villas and decorative ornaments.

6.7 Ventilation and Natural Lighting

- It is necessary to provide opening for ventilation and natural lighting for all living spaces overlooking an open area directly or through an internal or external courtyard. The area of such openings is stated in article (27).
- The width of the external courtyard "outer patio" should not be less than (1.50) meters, in case the depth of the external courtyard exceeds (1.50) meters.
- In case the utilization of the internal courtyards to provide natural ventilation and lighting, regulations stated in article (28) should be fulfilled.
- Cases of not counting the openings overlooking the external courtyard from among the openings designated for ventilation and lighting the living spaces:

- If the distance between the farthest point of the opening and the boundary of the building is greater than the distance between the two opposite sides of the outer courtyard.
- If part of the building projection or extension is greater than the clear height between the lower limit of the opening and projected slab bottom level.

6.8 Boundary Walls

1. The boundary walls or any other construction work should be built on the plot limit from all sides, and any aesthetic projection is allowed as per clause (6.14). In case, the boundary wall is not built from the neighborhood side, a neighbor's prior approval should be provided.
2. It is not allowed to build inner walls within the private villa plot.
3. The wall can be built inside the plot from the street side due to the difference in level between the majlis or guard service block and approved design level or for aesthetic purpose.
4. The height of the boundary wall must not exceed (4.00) m from the approved design level and not less than (2.20) m and these measurements are taken from the higher setback.
5. For any service blocks or buildings attached to the boundary wall, it is not permitted to make any openings or entrances overlooking the outside except the entrance and windows of the majlis, guard service block windows, pedestrian & cars entrances overlooking the road, and living space openings overlooking the sikka.
6. An electrical room may be built at the front boundary wall, and it may be connected to the other service blocks and with the same height.
7. The boundary wall will be permitted only if the permitted building's roof has been built with a percentage not less than (10%) of the plot area for residential granted plots.
8. Structural regulations shall be referred in case there is a difference in levels on plot limit according to the leveling certificate from the Concerned Department. As a result, the Competent Department should request to solve such difference according to the site condition.

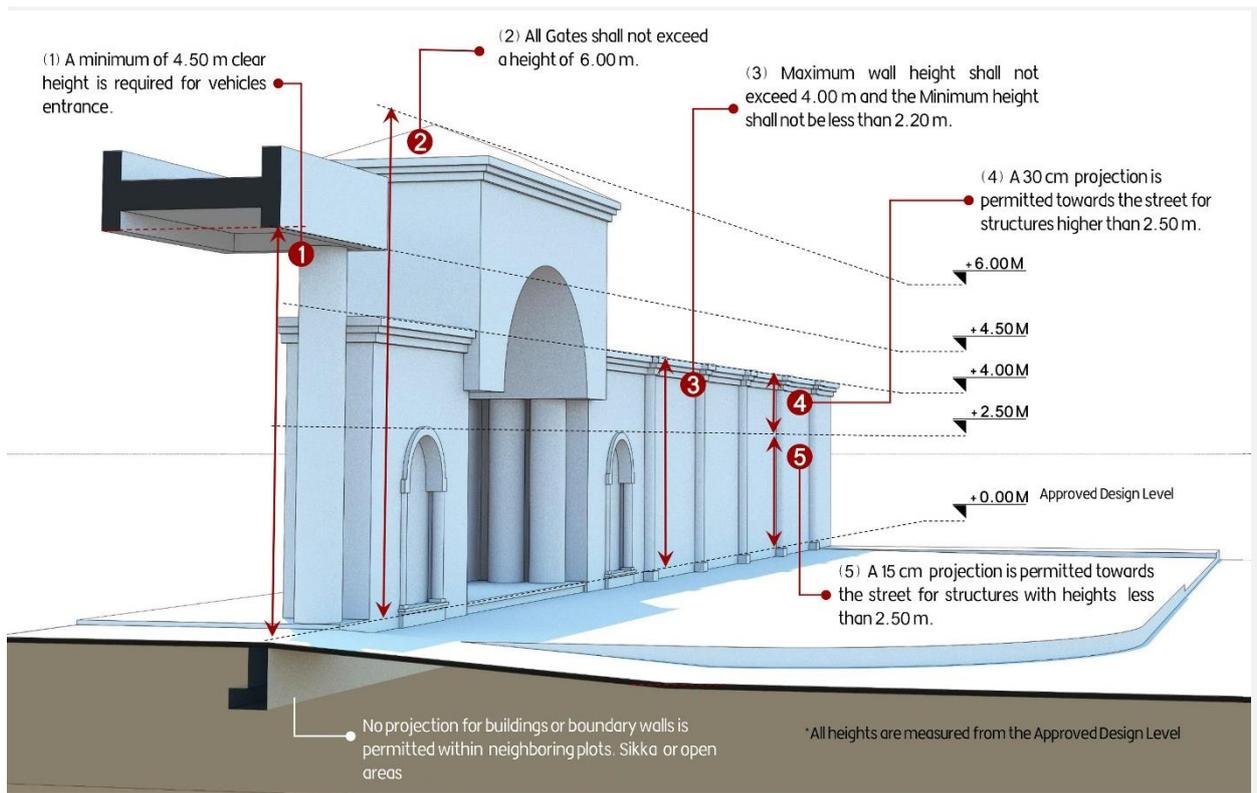


Figure No. (10) Residential villa wall (boundary wall) requirements

6.9 Entrances, Gates and Parking Lots

Entrance and gate locations shall be determined according to Town Planning Requirements, as stated below:

A. Car Entrance

- The width of car entrance should not exceed (6.10) meters and not less than (3.00) meters. The minimum clear height of the of main gate roof is (4.50) m and the maximum total height is (6.00) m. An approval of Civil Defense is required in case of reducing the height of the gate to less than (4.50) meters.
- If planning conditions do not mention the locations of the entrances and gates, only one entrance for cars is allowed on the main street or on either side of the plot overlooking the corner of two main roads only.
- The car entrance must not be opened on the corner of the plot limit "chamfer edge". The entrance should be opened on a distance not less than (4.00) m from the "chamfer edge" to provide a clear view during traffic movement.
- Car entrance location is subject to the Town Planning Requirements, and the approval of the Competent Department in the Municipality is obtained in accordance with the followed standards.

B. Individuals Entrance

- Individual's entrance width shall not be more than (2.00) m and no less than (1.00) m.
- Only (2) pedestrian entrances are permitted with the main entrance towards the road, and only one pedestrian entrance is permitted from the other roads and sikkas.
- It is not allowed to open any entrance outside the plot limits.

C. Car Parking

A minimum of (2) parking spaces must be provided within the plot.

6.10 Stairs

- One single staircase connecting all floors is permitted only within the villa, and it can be of any approved construction material in accordance with the approval of the Competent Department. Furthermore, it should be fire-resistant for minimum two hours.
- It is required that stairs cladding materials is of a fire-resistant material.
- Requirements mentioned in Article (38) of this regulation shall be applied.
- An external steel stair is only allowed to reach the roof level of the villa and service blocks for maintenance purposes and it should not be located on the façade that overlooks the road.

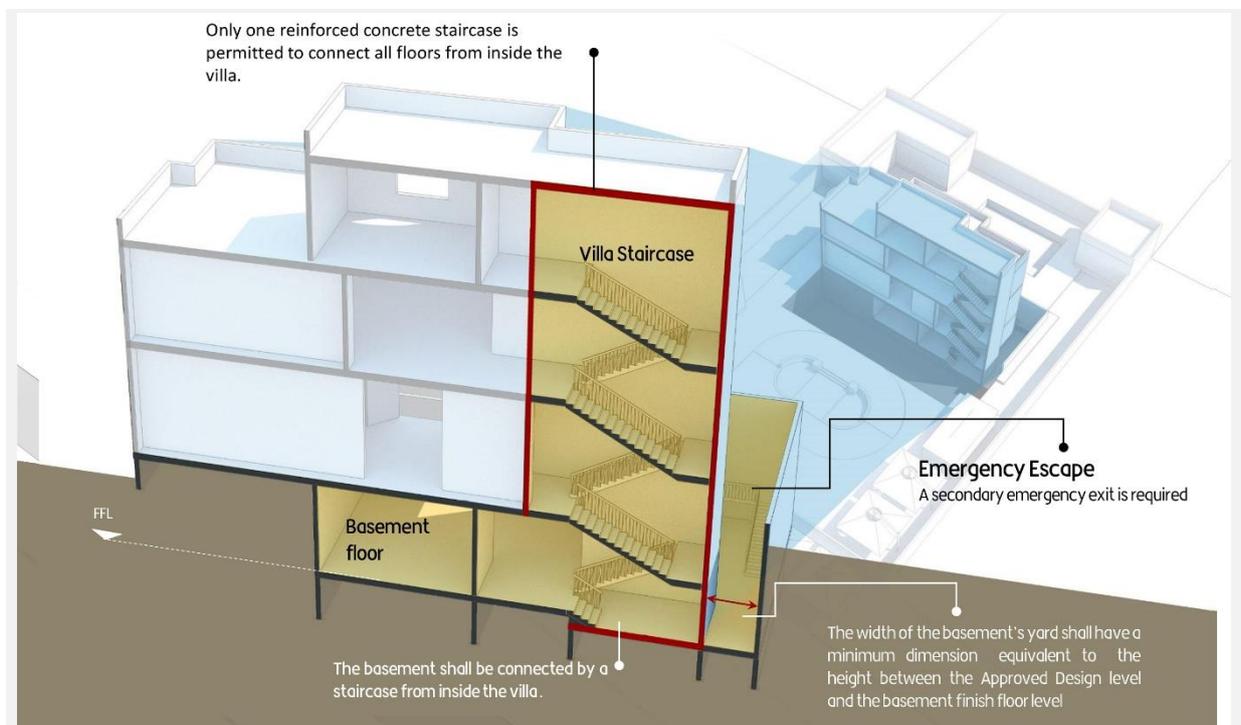


Figure No. (11) Residential villa and basement stairs requirements

6.11 Corridors

The width of the internal corridors between rooms and residential spaces shall not be less than (1.20) meters.

6.12 Areas and Dimensions of Spaces

Floor area and dimensions of any space or room in the villa and service blocks shall not be less than what is mentioned in Table (3).

Table No. (3) shows the minimum permissible spaces and dimensions for spaces, services and residential rooms

#	Space	Minimum Area (m ²)	Minimum Dimension (m)
1	Living Room/ Dining Room	12.00	3.00
2	Bedroom	12.00	3.00
3	Office	10.00	2.50
4	Kitchen (Open kitchen)	7.00	2.50
5	Pantry/Preparatory Kitchen	4.00	1.80
6	Guard/ Servant Room	7.00	2.20
7	Bathroom / Guard- Servant Bathroom	3.00	1.50
8	Toilet	1.80	1.10

*Thickness of all the external walls of the buildings must not be less than (20) cm.

6.13 Sanitary Rooms

The villa must be equipped with all necessary sanitary utilities equipment, including bathrooms, toilets and kitchens.

6.14 Projections

- An unusable aesthetic projection is permitted in residential villas and service blocks setbacks of a maximum projection of (0.30) meters inside the plot and at a height not less than (1.00) m from windows sill level.
- An unusable aesthetic projection of (1.00) meters is permitted for roof parapet in residential villas.
- An unusable aesthetic projection on the boundary wall towards the roads is permitted to be extended with a maximum length of (0.30) m from the plot limit and its height is not less than (2.50) m from the approved design level. If the height is less than (2.50) m, the projection is allowed by a maximum of (0.15) m only.
- No aesthetic projection/ building and wall construction works is allowed outside the plot limit, towards the neighborhood side and other sides.

6.15 Building Colors and Façades Symmetry

The public style (surrounding environmental character) must be taken into consideration in the design of all façades, especially those overlooking the streets and roads in terms of architecture, aesthetics, and urban character. The location, general appearance, and the harmony between facades of buildings and walls should be also taken into consideration.

6.16 Design Requirements

- It is prohibited to divide the residential villa into residential apartments or independent units.
- In case of making an extension to the residential villa, the main connection between the extension and the main villa should be a direct main space in all floors. The extension should be in harmony with the main villa in accordance to appearance and façade. It is also necessary to make one main entrance for the residential villa.
- It is allowable to construct villas and service blocks - according to the nature of the project - from new modern construction systems and under the approval of its Competent Department. It is possible to combine more than one approved construction system to achieve life span of the building, and the structural safety requirements, provided that they are all should be fire-resistant in accordance with the conditions and requirements of Civil Defense.
- When designing and implementing open spaces, courtyards, entrances, roofs and basements in the plot, the consulting office is obligated to take the necessary measures to ensure rainwater drainage outside the plot and away from the buildings or the neighborhood and to ensure that water does not infiltrate it from outside.
- When designing services on the roof of the building, the consultant should take into consideration the aesthetic and general appearance, and it is prohibited to place services on the roof of any building that is attached to the boundary wall unless it is hidden by an aesthetic cover. In addition, its height is calculated within the building height.

Article (7): Investment Housing

7.1 Built up Ratio

Built up ratio shall be applied according to the planning requirements issued by its Concerned Department.

7.2 Setbacks

1. **Investment Villas:** Setback from plot limit towards the road and neighborhood must not be less than (3.00) m, and not less than (1.50) m towards the other sides. It is allowed to build service blocks on plot limit except toward the street side, except the transformer room, in accordance with the requirements of Eithad Water and Electricity 'EithadWE'.
2. **Residential Investment Buildings:** Setbacks shall be applied according to planning requirements issued by its Concerned Department.
3. General requirements are referred to in Article No. (22) of this regulation.

Table No. (4) Shows setbacks for investment villas

#	Building	Setbacks		
		Street	Neighborhood	Other Borders
1	Villas and their blocks (Residential Investment)	(3.00) m	(3.00) m	(1.50) m
2	Buildings (Residential Investment)	According to the requirements of its Concerned Department		

7.3 Levels, Heights and Number of Floors

1. Ground floor finish level must not exceed (1.20) m from the approval design level.
2. All clear heights mentioned in clause No. (6.3) of article No. (6) of this regulation, Table No. (2), Fig. No.(5&6) regarding floor heights of residential villas shall be applied.
3. Investment villas are allowed to have ground, first, and roof floor, in addition to a basement floor. The number of floors of residential buildings is applied according to the planning requirements issued by its Concerned Department.

7.4 Utilities Blocks

- It is allowed to build utility rooms only upon the request of its relevant authority such as a utility room built attached to the boundary wall and without any front setback.
- It is permitted to build other utility blocks to serve investment villas' complex, with a condition to apply the required setbacks as per table (4) of clause (7.2) of article (7).

7.5 Basement Floor

1. **Investment Villas:** It is permitted to build a basement floor with an area designated for the ground floor, taking into consideration the requirements of the basement floor in residential private villas.
2. **Residential Investment Buildings:** It is permitted to build the basement floor on the entire plot ensuring that the slab level that is outside the ground floor boundary doesn't exceed the approved design level, with fulfilling the net approved height. In addition, it is not permitted to exceed the approved building limit, with applying the approved requirements in article (30) of this regulation regarding parking lot dimensions, slope and width of ramp.
3. General requirements for the basement in article No. (25) of this regulation must be followed.

7.6 Roof Floor

- a. **Investment Villas:** Apply the conditions similarly for the roof floor of residential private villas as per clause (6.6)
 - b. **Residential Investment Buildings:** The requirements of article No. (26) of this regulation shall be applied. It is not permitted to construct residential spaces on the roof floor and it is limited to services as mentioned in article No. (26). In addition, a Gym can be permitted in the roof but with the following conditions:
 - It does not exceed the specified ratio for the roof floor.
 - Building height should not be less than (Ground + 6) floors.
 - Its area should be in proportion with the number of occupants of the building, number of floors, and total building area.
 - The structural design of the gym floor slab should be taken into consideration according to the sports facilities used.
- The main stairs must be connected to the roof, but if there is more than one staircase in the building, single staircase is enough to be connected to the roof floor.
- For the purposes of urban harmony in the emirate, the following must be done:
- No air-conditioning equipment or ducts are placed on building façades, and the use of air-conditioning window type is not permitted.
 - All air conditioners must be placed on the roofs of buildings and invisibly from outside the building.

7.7 Boundary Walls

1. **Investment Villas:** Boundary walls must be built on the plot boundaries with the same requirements as the boundary walls of the residential private villas per clause No. (6.8) in article No. (6). In case of a request not to build a wall from the neighborhood, the prior approval of the neighbor is required.

It is permitted to construct a boundary wall separating the villas, but in a way that it does not exceed the height of the main boundary wall.

2. **Residential Investment Buildings:** It is not permitted to permit a boundary wall at any of the boundaries of the plot unless there are planning requirements issued by its Concerned Department.
3. Refer to paragraph (8) of clause no. (6.8) of this regulation regarding level difference on plot limit.

7.8 Entrances and Car Parking

1. Entrance and gate locations of the plot is determined according to the planning requirements issued by Concerned Department.
2. Each investment villa is allowed to have a main gate towards the street, ensuring that car parking is provided within the plot.
3. Number of parking lots required is determined according to the following table:

Table No. (5) Shows minimum number of parking lots for investment villas

Use	Details	Minimum Number
Investment Villas	Residential Villa	1
Residential Apartments	An apartment of 150 m2 or less.	1
	An apartment of more than (150) m2	2
	(2) Studio	1
People of Determination Parking	Allocating one car park for people of determination for each (33) car parks.	

4. Conditions specified for car parking shall be applied as in Article (30) of this regulation.

7.9 Areas and Dimensions of Spaces

All areas and dimensions of spaces for residential private villas in clause (6.12) of article No. (6) of this regulation shall be applied. In addition, the area of studios and bedroom area is shown in the following table:

Table No. (6) Shows minimum area for different spaces

Type	Minimum Area in m2	Minimum Dimension in m
1 Studio(excluding Services)	18.00	3.50
2 Bedroom	12.00	3.00
3 Entrance Hall for Residential Buildings	Minimum width of Residential Entrance is (2.40) m	

The thickness of walls separating the residential units from each other and the public corridors must not be less than (20) cm, and the thickness of all external walls of the buildings must not be less than (20) cm.

7.10 Projections

Requirements of clause (6.14) of article (6) shall be applied to investment villas, and the requirements of article No. (23) of this regulation shall be applied for investment residential buildings.

7.11 Sanitary Rooms

The minimum sanitary rooms that must be provided in investment villas are as follows

Table No. (7) shows sanitary rooms that shall be available for investment villas

Units		Sanitary Rooms
1	Residential Apartment	Each apartment in the building must be provided with the necessary Sanitary Rooms such as bathrooms, toilets and kitchens. At least one bathroom (or a toilet in the case there is more than one bathroom) is accessed from outside the Living Rooms.
2	Studio	A bathroom and pantry shall be provided for each studio in the building.

7.12 Stairs

- **Investment villas:** Conditions mentioned in clause (6.10) of article No. (6) of this regulation shall be applied.
- **Investment residential buildings:** Requirements mentioned in article (38) of this regulation shall be applied.

7.13 Corridors

1. The width of internal corridors between rooms and residential spaces shall not be less than (1.20) meters.
2. The minimum width of public corridors of commercial residential buildings is shown in, Table No. (17) clause No. (10.12) of article (10) of this Regulation.

Article (8): Labor Accommodation

8.1 Location

1. It is permitted to establish labor accommodation on plots designated for this purpose or industrial lands according to the land use classification and legalization scheme and requirements issued by its Concerned Department and in accordance with the requirements of the Ministry of Labor.
2. Regarding labor accommodation locations, it should not be located near families' residence nor girls' schools and hostels nor near unhealthy spaces such as factories, etc.

8.2 Built up Ratio

1. The specified built up ratio shall be applied according to the planning requirements issued by its Concerned Department.
2. The maximum area of labor accommodation in industrial plots shall be (25%) of the area of the industrial activity and in proportion with the number of workers for the industrial activity.

8.3 Setbacks

1. Determined setbacks shall be applied according to the planning requirements issued by the Concerned Department.
2. It is not permitted to build on the plot boundaries, unless stated in land uses classification & legalization system.
3. If Setbacks are not mentioned in the planning requirements, then setbacks shall be applied as follows:
 - Setbacks from plot boundaries must not be less than (6.00) m from the street side.
 - Setbacks from plot boundaries must not be less than (3.00) m from the neighborhood and the other borders.
 - Internal Setbacks between buildings must not be less than (6.00) m.
 - Labor’s accommodation setback from industrial building (if any) must not be less than (6.00) m.

Table No. (8) Shows setbacks for labor accommodation

Building	Setbacks		
	Street	Neighborhood and other Borders	Industrial and Other Buildings
Labor accommodation	(6.00)m	(3.00)m	(6.00)m

8.4 Levels, Heights and Number of Floors

1. The ground floor finish level must not exceed (1.20) m from the approved design level.
2. The clear floor height should not be less than (3.00) m and not more than (4.50) m.
3. Number of floors is determined according to planning requirements issued by its Concerned Department.

8.5 Basement Floor

1. **Labor Accommodation Plots:** It is permitted to build the basement floor on the entire plot ensuring that the slab level that is outside the ground floor boundary doesn’t exceed the approved design level, with fulfilling the net approved height. The use of this floor is limited to building services (stores, kitchens, etc.), with applying approved requirements in Article (30) of this regulation regarding parking lot dimensions, slope and width of ramp.

2. **Industrial Plots:** It is allowed to build a basement floor in labor accommodation on the building area allocated to the ground floor, ensuring that its use is limited to building's services (stores - kitchens - etc.). General requirements of the basement must be followed as per article No. (25) of this regulation.

8.6 Roof Floor

Roof Floor is restricted to service rooms only (elevator room, water tanks, central air-conditioning equipment, etc.). The requirements shall be applied as stated in article No. (26) of this regulation.

8.7 Boundary Walls

- Boundary walls of labor accommodation must be built on plot boundaries from all sides, provided that its height is not less than (1.80) m and not more than (4.00) m, with the necessity to paint these Boundary walls in a way that does not distort the general appearance .
- A separation wall is permitted between the industrial activity and the labor accommodation if they exist together on the plot (industrial plots), provided that the height of the separation wall does not exceed (1.60) m.
- Refer to paragraph (8) of clause no. (6.8) of this regulation regarding level difference at plot limit.

8.8 Entrances and Car Parking

1. The requirements for car parking shall be applied as stated in article (30) of this regulation.
2. Number of parking spaces required must not be less than the following:

Table No. (9) shows minimum no. of parking lots required for labor accommodation

	Description	Minimum No. of Parking Lots
1	For each (50) workers who live in a specific collective accommodation	One Bus (1)
2	Each (5) rooms of supervisors or employees	1

8.9 Areas and Dimensions of Spaces

1. Areas and dimensions of spaces are applied as in the following table

Table No. (10) shows areas and dimensions of rooms for labor accommodation

	Room/space type	Minimum Space
1	Labor room	(3.00) m ² /laborer, number of workers shall not exceed (8) persons per room.
2	Dining hall	(1.40) to (1.60) m ² /laborer, it accommodates (30%) of total number of workers.
3	Common kitchen	(0.50) m ² /laborer, a minimum width of (3.20) m ² and It shall be accommodating (30%) of total workers.

	Room/space type	Minimum Space
4	Laundry	(0.50) m ² /Laborer, a minimum width of (3.20) m ² and It shall be accommodating (30%) of total workers.
5	First aid / health isolation room	12 m ²
6	Internal yard (Patio)	36 m ² (with a minimum width of 6m)

2. Areas and dimensions of spaces that are not mentioned above shall be applied as shown in Table No. (3).
3. Dining halls must be provided as shown in the above table, and their design must be in accordance with health requirements issued by Public Health Administration.
4. It is allowed to provide rooms with independent services (not combined) for the supervisors. Each one room occupies (40) workers.
5. Internal wall thickness separating the rooms from each other and between them and public corridors must not be less than (20) cm, and the thickness of all external walls of the buildings must not be less than (20) cm.

8.10 Projections

In line with Article No. (23) of this regulation, the first floor corridors may be projected by (1.50) m within the setback between buildings and external setbacks, and it is not permitted to close these corridors upon emergency.

8.11 Sanitary Rooms

The following should be taken into consideration in sanitary rooms in labor accommodation:

1. Number of toilets must be proportional to the number of workers, where a toilet, washbasin and shower is for every ten workers.
2. Toilets must be separated from sinks and bathtubs within cluster services.
3. One or more kitchens must be provided to prepare food, and the design and furnishings of the kitchen must be in accordance with Health Conditions stipulated in Public Health and Occupational Safety Legislation issued by Public Health Administration at the Department.

8.12 Corridors

Clear width of public corridors in labor accommodation should not be less than the following:

Table No. (11) shows clear width of public corridors for labor accommodation

Use	Clear width of Corridors	
Labor accommodation	(1.50)m One-way Rooms	(1.80)m Two-way Rooms

8.13 General Requirements

- A. It is not allowed to have a bathroom or a preparatory kitchen (pantry) inside the workers' rooms. Service Rooms (kitchens, laundry, bathrooms and toilets) can be grouped in one or more places inside the residence or in a separate building within the plot boundaries.
- B. It is permitted to build a labor service blocks on agricultural plots. The area would be determined according to the number of workers authorized to work on the farm, and that the areas and dimensions are applied as per Table No. (3) in article No. (6), and clause No. (8.9) in article No. (8) of this regulation.
- C. In labor accommodation, the availability of various health factors such as air ventilation, freedom of dust and smoke, natural lighting, and high floor level to prevent water drainage should be taken into consideration.
- D. Doors of rooms or main entrances must be opened from inside the plot.
- E. The structural skeleton, floors, and slabs shall be from concrete. It is not allowed to make metal (aluminum) or wooden slabs or roofs in labor accommodation except in agricultural plots. Moreover, the thickness of walls shall not be less than (20) cm.
- F. Temporary caravans and light structures are not permitted to be used as labors' accommodation.
- G. A garbage room or an open pool for waste containers must be provided within the boundaries of the plot, according to the terms of the garbage rooms mentioned in this regulation. This container may be located on the front setback towards the street side.
- H. In labor accommodation, necessary emergency measures must be taken, and the requirements of prevention, safety, warning and fire fighting must be applied in accordance with the regulations and specifications approved by Civil Defense Department in the Emirate.

Article (9) Staff Accommodation

9.1 Location

- 1. It is permitted to establish staff accommodation complexes on plots designated for this purpose in accordance with the scheme of lands uses and classification requirements issued by the Concerned Department.
- 2. It is allowable to build a staff accommodation complex- for families - on plots according to the requirements mentioned for each type of these buildings or within real estate development projects and with the approval of the Competent Department, provided that it is separated from the project.

9.2 Built up Ratio

Built up ratio is determined according to the planning requirements issued by the Concerned Department and shall be applied to the total buildings on the plot, including the accommodation of employees.

9.3 Setbacks

1. Setbacks shall be applied according to the planning requirements issued by the Concerned Department.
2. Buildings are not permitted to be built directly on plot limit, unless otherwise stated in lands uses and classification system.
3. If setbacks are not mentioned in the planning requirements, setbacks shall be applied from the plot limit as follows:
 - Setback from plot limit must not be less than (6.00) m towards the street side.
 - Setback from plot limit must not be less than (3.00) m from the neighborhood and the other sides.
 - Internal setback between the buildings must not be less than (6.00) m.

Table No. (12) shows setbacks for staff accommodation

Building	Setbacks		
	Street	Neighborhood & other borders	Between Buildings
Staff accommodation	(6.00) m	(3.00) m	(6.00) m

9.4 Levels, Heights and Number of Floors

1. Ground floor finish level must not exceed (1.20) m from the approved design level.
2. Clear floor height should not be less than (3.00) m and not more than (4.50) m.
3. Number of floors shall be determined according to the planning requirements issued by the Concerned Department.

9.5 Basement Floor

It is permitted to construct a basement floor in staff accommodation on the building area allocated to the ground floor, provided that its use is limited building's services (e.g. stores, kitchens, etc.), and the general requirements of the basement floor must be followed as addressed in article No. (25) of this regulation.

9.6 Roof Floor

Roof floor is restricted to service rooms only (e.g. elevator room, water tanks, central air-conditioning equipment, etc.). The requirements shall be applied as stated in article (26) of this regulation.

9.7 Boundary Walls

- Boundary walls for the staff accommodation must be built on the plot boundaries from all sides, with a height not less than (1.80) m and no more than (4.00) m, and with the necessity to paint these walls in a way that does not distort the general appearance.
- Refer to paragraph (8) of clause (6.8) of this regulation that is related to the level difference at the plot limit.

9.8 Entrances and Car Parking

1. Main entrances of the buildings must be from inside the plot.
2. Car parking specifications shall be applied as stated in article (30) of this regulation.
3. Number of parking lots required must not be less than the following:

Table No. (13) shows minimum number of parking lots required for staff residence

	Detail	Minimum of Parking Lots
Staff Residence/ Family	Requirements for determining the no. of parking spaces required for residential investment addressed in Table No. (5) shall be applied.	
Staff Residence/ Bachelors	Room / 2 person	one parking / 2 room
	Room / 3 person, Room / 4 person	one parking / room
	50 Rooms	one bus (1)
People of Determination	Car parking for people of determination must be provided, as shown in Table No. (16)	

9.9 Areas and Dimensions of Spaces

1. Number of employees should not exceed (4) people in one room, and a first aid room and a health isolation room must be provided.

Table No. (14) shows areas and dimensions of spaces for staff residence

	Type of Room / Space	Minimum Space
1	Single Room	10 m ² (doesn't include bathroom or pantry)
2	Room / 2 person	12 m ² (doesn't include bathroom or pantry)
3	Room / 3 person	15 m ² (doesn't include bathroom or pantry)
4	Room / 4 person	18 m ² (doesn't include bathroom or pantry)
5	Bathroom	3.00m ² (minimum width 1.50m)
6	Pantry attached to room	3.00m ²

Type of Room / Space		Minimum Space
7	Main Kitchen	(0.50) m ² per employee, and for (30%) of the total employees and a minimum width of 3.20 m
8	Laundry	(0.50) m ² per employee, and for (30%) of the total employees and a minimum width of 3.20 m
9	First Aid/ Health Isolation Room	12 m ²

2. Areas and dimensions of spaces that are not mentioned above shall be applied as shown in table No. (3).
3. If dining halls are available, they must be proportional to the number of employees, provided that these halls accommodate one third of the total number of employees at one time as a minimum (minimum required space is (1.50) m per employee). The design of the dining hall must be in accordance with health conditions stated in public health and occupational safety legislation issued by Public Health Administration.
4. Walls thickness separating the rooms from each other and between them and public corridors must not be less than (20) cm, and the thickness of all external walls of the buildings must not be less than (20) cm.

9.10 Projections

According to article No. (23) of this regulation, the first floor corridors may be projected by (1.50) m within the setback between buildings and external setbacks with at least (3.00) m height, and it is not permitted to close these corridors upon emergence.

9.11 Sanitary Rooms

The following should be taken into consideration in sanitary rooms in staff accommodation:

1. The requirements of sanitary rooms for investment villas are applied similarly as residential private villas, as per Table (7) in clause No. (7.10) for family accommodation.
2. For staff accommodation/ bachelors' accommodation, the following must be taken into consideration:
 - Each room must be equipped with a separate bathroom.
 - A pantry can be provided for each room to prepare food in the absence of combined dining halls. The design and furnishings of the kitchen/pantry must be in accordance with health conditions stated in public health and occupational safety legislation issued by Public Health Administration and Civil Defense.

9.12 Corridors

Clear width of public corridors in staff accommodation should not be less than the following:

Table No. (15) shows Clear width of public corridors for staff accommodation

Use	Clear width of Corridors	
Labor accommodation	(1.50)m	(1.80)m
	One-way rooms	Two-way rooms

9.13 General Requirements

- A. A group of entertainment services can be provided (Gym – TV hall - outdoor playgrounds) in proportion with the number of employees in the building.
- B. In staff accommodation, the availability of various health conditions such as air ventilation, freedom of dust and smoke, natural lighting, and high floor level to prevent water leakage shall be taken into consideration.
- C. Temporary caravans and light structures are not permitted to be used as staff accommodation.
- D. A garbage room or an open pool for waste containers must be provided within the boundaries of the plot, according to the requirements of garbage rooms mentioned in this regulation, and such containers may be placed in the front setback towards the street side
- E. In staff accommodation, necessary emergency measures must be considered, and the requirements of prevention, safety, warning and fire fighting must be applied according to regulations and specifications approved by Civil Defense department in the emirate.

Article (10): Residential - Commercial Buildings

10.1 Built up Ratio

Specified built up ratio shall be applied according to the planning requirements issued by the Concerned Department.

10.2 Setbacks

Setbacks shall be applied to (residential - commercial) buildings according to the planning requirements issued by the Concerned Department.

10.3 Levels, Heights and Number of Floors

1. The ground floor finish level shall not exceed (1.20) m of the approved design level.
2. Clear heights of the residential floors are applied according to Table No. (2), and clear heights of the ground and mezzanine floor (for commercial and office Uses) as per Table No. (18).
3. Number of floors is determined according to the planning requirements issued by the Concerned Department.
4. A service floor is allowed between typical floors in buildings with heights more than (20) floors above the ground floor, and it is designated for mechanical and electrical (MEP) services and their related accessories. Such spaces are not allowed for living, housing purposes, commercial, recreational purposes, or similar. The height of the service floor is not more than (3.00) meters and its net height is not less than (2.40) meters. It is not counted from among the permitted floors of the plot.

10.4 Basement Floor

1. It is permitted to build the basement floor on the entire plot ensuring that the slab level that is outside the ground floor boundary doesn't exceed the approved design level, with fulfilling the clear approved height. In addition, it is not permitted to exceed the approved building limit, and applying the approved requirements in article (30) of this regulation regarding parking lot dimensions, slope and width of ramp.
2. It is permitted to build more than one basement for car parking.
3. The use of the basement floor is limited to building services (car parking - stores - kitchens - etc.). The general requirements for the basement addressed in article No. (25) of this regulation must be followed.
4. Maximum height of the basement slab level should not exceed (1.20) meters.

10.5 Mezzanine Floor

Requirements for the mezzanine floor shall be applied as indicated in the requirements for commercial buildings in clause No. (11.5) in article No. (11) of this regulation.

10.6 Roof Floor

1. Requirements of article (26) of this regulation shall be applied. It is not permitted to make residential spaces on the roof floor, and it is limited to services, in addition to allowing a GYM with the following conditions:
 - It does not exceed the specified ratio for the roof.
 - Building height should not be less than (G+ 6) floors.
 - Its area should be in proportion with the number of occupants of the building, number of built floors, and total building area.
 - The structural design of the Gym floor slab should be taken into consideration the effect of sports equipment.
2. The main stairs must be connected to the roof, however, if there are more than one staircase in the building, at least single staircase must be connected to the roof.
3. For the purposes of urban harmony in the emirate, the following must be done:
 - Air-conditioning equipment or ducts shall not be placed on the building façades, and the use of air-conditioning window type equipment is not permitted.
 - All air conditioners must be placed on the buildings’ roofs and shall be invisible from outside the building.

10.7 Boundary Walls

- It is not permitted to build a boundry wall on plot limits unless there are planning requirements issued by the Concerned Department.
- Refer to paragraph (8) of Clause (6.8) of this regulation that is related to level difference at plot limit.

10.8 Car Parking

1. Minimum number of parking lots shall be determined according to the following table:

Table No. (16) shows minimum number of parking lots for (Residential - Commercial) buildings.

Use	Minimum Number of Parking Lots
Residential Apartments	Providing parking lots according to the car parking requirements of residential investment Buildings, as shown in Table (5).
Offices and Shops	Provision of park lots according to the commercial and office buildings parking requirements as per Table No. (19)
	Car parks for people of determination are allocated as follows:

Use	Minimum Number of Parking Lots	
People of Determination Parking	From 10 : 200 Parking Lots	One parking lot for every 50 cars
	From 201 to 1000 Parking Lots	One parking lot per 100 cars
	>1000 Parking Lots	One parking lot per 200 cars
Charging stations for electric and hybrid vehicles must be provided in accordance with the Requirements set out in Paragraph (403.03) and Table No. (15) of Ras Al Khaimah Green Building Regulations “Barjeel.”		

2. Parking requirements stated in article (30) of this regulation shall be applied.

10.9 Areas and Dimensions of Spaces

1. All areas and dimensions of spaces for residential uses shall be applied in accordance to clause (6.12) for residential private use, in addition to the requirements for residential investment according to clause (7.9) and table No. (6), in addition to the requirements established for determining areas of office and commercial uses of commercial buildings according to clause (9.11) and table No. (20).
2. The area of the store within the shop/showroom should not exceed (30%) of shop/showroom area.
3. Walls thickness separating the rooms from each other and between public corridors must not be less than (20) cm, and the thickness of all external walls of the buildings must not be less than (20) cm.

10.10 Projections

- Projections shall be applied according to the planning requirements issued by the Concerned Department. Refer to article No. (23) of this regulation.
- It is permitted to extend the mezzanine floor from the ground floor limit towards the road side with the same approved typical floors projection to be in consistent and in harmony with the general appearance of the Emirate. This applies for buildings with a maximum height of “ground + mezzanine + 4 floors”.

10.11 Sanitary Rooms

The requirements of sanitary rooms for residential investment buildings applies the same as residential private, as per table (7) in clause No. (7.11). The requirements of sanitary rooms for commercial buildings for the office and commercial part are also applied as per table No. (21).

10.12 Corridors

1. Clear width of internal corridors between rooms and residential or office spaces shall not be less than (1.20) meters.
2. Clear width of public corridors shall not be less than in the following table:

Table No. (17) shows minimum public corridors (Residential – Commercial) buildings

Use		Corridors Clear Width	
1	Residential & Office Buildings	(1.50)m For buildings equal to or less than (250) m ² of floor area	(1.80)m For buildings that exceed a floor area of (250) m ²
2	Corridors in front of Elevators	It depends on the width of the main corridor leading to it, and the locations of the elevators on one or two sides, and the dimensions of the corridors in front of the elevators must not be less, as mentioned in figure No. (25) in Clause (36.1) of Article (36).	

Second: Commercial Buildings Requirements

Article (11): Commercial Buildings Requirements

11.1 Built up Ratio

Specified built up ratio shall be applied according to the planning requirements issued by the Concerned Department.

11.2 Setbacks

Setbacks shall be applied to Commercial Buildings according to the planning requirements issued by the Concerned Department.

11.3 Levels, Heights and Number of Floors

1. Level of the ground floor finish must not exceed (1.20) m from the approved design level.
2. Heights of commercial and office floors shall follow Table (18).
3. Number of floors shall be applied according to the planning requirements issued by the Concerned Department.
4. Different levels shall be treated in the case of a level difference at the plot limit, and in line with the relevant structural regulations.
5. If there is a half-mezzanine floor (overlooking ground floor), the maximum clear height of ground floor is (8 meters + the slab thickness including the finishes), and the minimum clear height of ground floor is (6 meters + the slab thickness including the finishes) as shown in Figure (12).

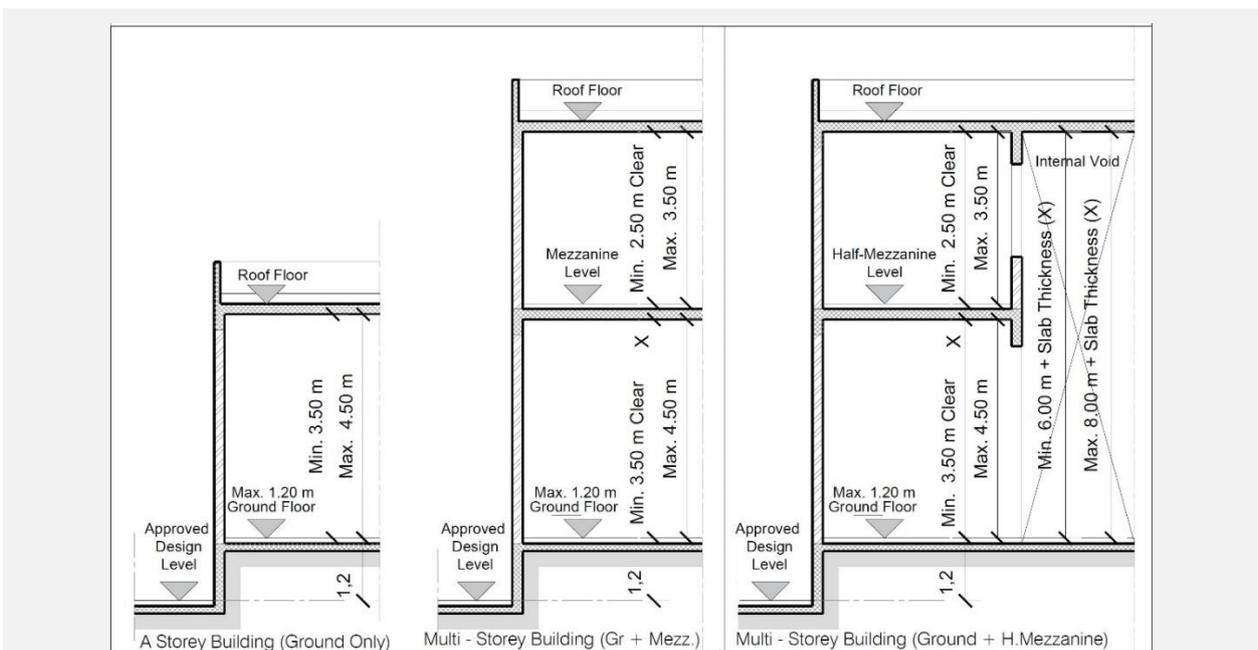


Figure No. 12. clear interior height of story/ multi-story buildings typical floor (for commercial and office uses)

Table No. (18) shows minimum and maximum Clear Height in Commercial and Office Uses

Commercial and Office Uses		Minimum Clear Height	Maximum Clear Height
1	Ground Floor	(3.50) m	(4.50) m
		If adding half mezzanine, the height will be (2.50) m	without mezzanine
		The Competent Department may approve the increase in heights for special considerations	
2	Full Mezzanine – Half-mezzanine	(2.50) m	(3.50) m
3	Basement Floor (Net under beams and hanging service lines)	(2.50) m	(3.50) m

11.4 Basement Floor

1. Requirements for the basement must be followed as addressed in article No. (25) of this regulation.
2. Maximum height of the basements roof should not exceed (1.20) m measured from the approved design level towards the street adjacent to the main entrance of the buildings.

11.5 Mezzanine Floor

- a. It is permitted to build Mezzanine for (100%) of the ground floor area in the plots, in which it is permitted to construct a mezzanine floor in accordance with planning requirements issued by the Concerned Department and land use classification and codification system in the Emirate.
- b. It is permitted to use mezzanine floor separately as offices or for the building's service purposes.
- c. It is permitted to use mezzanine floor separately over (100%) of the mezzanine area, if the ground and mezzanine floors are used as a commercial center. In this case, the presence of an internal connection facility, an escalator between the two floors, or elevators with a glass façade of not less than (10) persons' capacity per elevator.
- d. Mezzanine floor is permitted to be used separately over (100%) of the mezzanine area in case it is used as a car parking.
- e. It is not permitted to construct another mezzanine within the ground floor if the original mezzanine floor is isolated and used separately.
- f. It is not permitted to construct verandas, projections or balconies in the mezzanine floor.

11.6 Roof Floor

Roof floor is limited only to service rooms (e.g. elevator room, water tanks, central air-conditioning equipment, etc.), and according to the conditions mentioned in article No. (26) of this regulation.

11.7 Boundary Walls

Boundary walls are not permitted on commercial plots.

11.8 Car Parking

Minimum number of parking lots shall be determined according to the following table.

Table No. (19) shows minimum number of parking lots for commercial buildings

	Use	Standards	Minimum No. of Parking
1	Offices	Each (70) m ² of net office space excluding corridors and various services.	1
2	Restaurants	Each (50) m ² of Net Area.	1
3	Commercial usage (e.g. commercial centers smaller than (930) m ² , shops, showrooms, etc.).	Each (70) m ² of Net Area.	1
4	Buildings that are fully utilized as commercial centers or retails of an area of more than (930) m ²	.Each (70) m ² of Net Area .1 Ground Floor can be fully .2 designated as parking lots	1

Parking lots designated for people of determination must be provided as per Table No. (16) -
Charging stations for electric and hybrid vehicles must be provided in accordance with the requirements -
."set out in clause (403.03) and table No. (15) of Ras Al Khaimah Green Building Regulations "Barjeel

11.9 Areas and Dimensions of Spaces

Areas and dimensions of commercial and office spaces must not be less than:

Table No. (20) shows minimum area and dimensions of commercial and office spaces

	Space Type	Minimum area (m ²)	Minimum dimension (m)
1	Shop	18.00	3.00
2	Showroom	80.00	8.00
3	Office room (for office usage)	10.00	2.50
4	Open office space (separt rental unit)	18.00	3.50
5	Open office space (open work space)	50.00	3.50
6	Toilet (WC)	1.80	1.10

The thickness of walls separating shops and office units from each other and between them and public corridors must not be less than (20) cm, and the thickness of all the external walls of the buildings must not be less than (20) cm.

The area of the store attached to the showroom or shop shall not exceed (30 %) of the showroom or shop's area.

11.10 Sanitary Rooms

Minimum sanitary rooms that must be available in commercial buildings shall be according to the following table:

Table No. (21) shows minimum required sanitary rooms for commercial buildings

Buildings		Sanitary Rooms			
1	Offices, Shops & Showrooms	Offices	-Toilets' space must be provided for each separate office or a toilet for each (50) m ² of net open or separated office space. -It is allowed to provide toilet space inside the office if the net office space is (50) m ² or more, and considering the same mentioned rate. It is not allowed for area less than (50) m ² .		
		Shops & Showrooms	Net commercial area is up to (300) m ²	Providing one private toilet for each shop / showroom, or providing one public toilet, provided that its specifications and dimensions are identical to people of Determination's Toilet.	
			Net Commercial Area is (301-900) m ²	(2) toilets for men and one for women	At least one toilet must be provided for people of determination.
			Net area is more than (900) m ² each (900) m ²	One toilet is added	
2	Commercial Centers & Public Entertainment Buildings	Net commercial or recreational area up to (900) m ²	(3) Toilets for men and (2) for women.	At least one toilet must be provided for People of determination.	
		Net commercial or recreational area is more than (900) m ²	One toilet for men and one toilet for women shall be added for every additional (900) m ²		
		If the commercial or recreational area exceeds (1500) m ²	Provide, at least, an additional men's toilet and women's toilet for People of Determination.		

11.11 Corridors

Clear width of public corridors of commercial buildings must not be less than the following:

Table No. (22) shows minimum corridor s’ clear width for commercial buildings

Use	Corridors Net Width	
Commercial Corridors	(2.40) m	(3.00)m
	One-way shops	Two-way shops
It is permitted to install kiosks in commercial corridors if the width the corridor on each side of the kiosk is not less than (1.50) m, provided that these kiosks are not connected or linked with each other for more than (6.00) m, the distance between kiosks is not less than (3.00) m, and the kiosk width shall not exceed (1.80) m.		

11.12 Loading/ Unloading Spaces

Requirements shall be followed as stated in clause (15.10) of article (15) of this regulation.

11.13 General Requirements

1. Prayer areas for both male and female shall be provided in shopping malls with an area of more than (900) m², and minimum utilities for both genders shall be provided in accordance with Article (16).
2. Service rooms like nursing rooms and baby changing rooms shall be provided.
3. Utility services required by relevant authorities (e.g. electricity room, telephone room, pump room, water tank or similar) shall be provided.
4. A service floor is allowed between typical floors in buildings with heights more than (20) floors, and it is dedicated for mechanical, electrical and sanitary (MEP) services. No spaces for living, residential, commercial, recreational or similar purposes are allowed within service floor. Its net height shall be not more than (3.00) m and not less than (2.40) m , and it shall not be counted among the permitted floors of the plot.

Article (12): Health Requirements for Facilities Carrying out

(Restaurants, Foodstuff & Beverages ‘F&B’)

1. The design of restaurants, “F&B” stores (e.g. restaurants, cafeterias, cafes, juice shops, vegetable and fruit stores, candy stores, refreshment stores, mills, toasters, frozen and dry food stores, bakeries, groceries, supermarkets, Selling seafood shops and other establishments) shall be made in accordance with health requirements issues by the Concerned Departments. The consultant Engineer must refer to these requirements during design stage.

2. Floors, walls and ceilings of restaurants, “F&B” shops shall have smooth surface finish, easy to clean, non-water absorbent, fire-resistant, light-colored, non-toxic and free of cracked materials. The floor shall have adequate slopes for ease of cleaning. The corners between the walls, between walls and floors, and between walls and ceiling must be airtight and curved for ease of cleaning.
3. Proper ventilation and lighting shall be provided for all internal spaces as stated in this regulation.
4. Shelves, electrical appliances, laundries, stores, chimneys, service tables must be provided, insect and rodent resistance devices must be installed on doors, windows and other outlets, and all that is necessary in accordance with the health conditions issued by the Concerned Departments.
5. Roofs of kitchens in restaurants and similar shall be made of reinforced concrete or similar fire rated material approved by civil Defense Department.
6. Restaurants, “F&B” stores must be equipped with all the necessary sanitary installations and in accordance with the sanitary and plumbing works requirements.
7. Chimneys for bakeries, restaurants and toasters should be located on the side of the Sikka or through the building skylights, in order to maintain the general good appearance of the building. It’s height should be no less than (4) m above the roof of the building, and it must be equipped with environmental treatment means so that it does not affect the neighborhood or the surrounding general appearance.
8. Chilled and freezing rooms must be equipped with a temperature gauge installed in a way that can be checked from the outside, and their doors must be made to open in both directions (e.g. from the inside and outside).

Article (13): Occupancy of Sidewalks and Outdoor Spaces (Cafés & Restaurants)

The design and permit of occupancy of sidewalks, outdoor spaces of cafés and restaurants are subjected to the requirements and specifications stated by the approved executive regulations of law no. (3) of 2018 regarding the occupancy of sidewalks and outdoor spaces.

Third: Tourist and Hotel Buildings Requirements

Article (14): Hotel Facilities Requirements

14.1 Location

It is permitted to establish different categories of hotel facilities in the authorized areas for such usage and according to the map of land use classification and codification system in the Emirate.

14.2 Built up Ratio

Built up ratio of area shall be applied according to the planning requirements issued by the Concerned Department.

14.3 Setbacks

Setbacks shall be applied according to the planning requirements issued by the Concerned Department.

14.4 Levels, Heights and Number of Floors

1. Level of the ground floor finish must not exceed (1.20) m from the approved design level.
2. Residential floors' heights are applied in as stated in table (2).
3. If the hotel is higher than (10) floors above the ground floor, it is allowed to construct a service floor for mechanical, electrical and sanitary (MEP) services, its net height shall be not more than (3.00) m and not less than (2.40) m. It can be repeated every (10) floors after approval of the Concerned Department.

14.5 Car Parking

Minimum number of parking lots shall be determined according to the following table:

Table No. (23) shows minimum number of parking lots for hotel facilities

Use	Detail	Minimum Parking Lots
Hotel Facilities	Hotel Rooms	One parking lot / 4 Rooms
	Hotel suite / Hotel apartment "Room & living room "	One parking / 2 Suites
	Hotel Apartment "Two rooms & more"	One parking / Apartment
	(100) Hotel rooms	One bus stop / 100 rooms
	Offices, retail shops and restaurants attached to hotel facilities	One parking lot / 50 m ² of net area
	Halls, celebration or multipurpose halls	One parking lot / 20 m ² of net area
	An additional (1) bus stop must be provided for "4 & 5 stars" hotels / 100 hotel rooms. Bus stop's dimensions shall not be less than (4.00 x 12.00) m.	
	(2) Taxi stands must be provided for touristic facilities and hotels with a rating of "4 & 5 Stars"	
	Shaded Parking Spaces must be provided for hotel establishments according to the requirements mentioned in Ras Al Khaimah Green Building Regulations (Barjeel).	

	Parking lots for People of Determination must be allocated as per Table No. (16)
	Charging stations for electric and hybrid vehicles must be provided in accordance with the requirements set out in clause (403.03) and table No. (15) of Ras Al Khaimah Green Building .”Regulations “Barjeel

14.6 Areas and Dimensions of Spaces

Areas and dimensions of the accommodation rooms in hotel buildings must not be less than the following:

- In hotels**, Net Area of rooms must not be less than the following table:

Table No. (24) shows minimum Net Area for hotel rooms, including bathroom area and does not include the balcony and room entrance.

Hotel Rating		Room Type	Minimum Room Size (with bathroom)
1	One Star/ Two-star Hotel	Single Room	m ² (13)
		Double Room	m ² (17)
		Minimum bathroom area including a shower is (3.50) m ²	
2	Three-star Hotel	Single Room	m ² (16)
		Double Room	m ² (20)
		Minimum bathroom area is (3.50) m ² in case of a shower only, or (3.80) m ² in .case of a shower + bathtub in the bathroom	
3	Four-star Hotel	Single Room	m ² (22)
		Double Room	m ² (26)
		Suites	(38) m ² , not including living room
		Minimum bathroom area is (3.50) m ² in case of a shower cubicle only, or .(3.80) m ² in case of a shower + bathtub in the bathroom	
4	Five-star Hotel	Single Room	m ² (30)
		Double Room	m ² (34)
		Suites	(48) m ² , not including Living Room
		Minimum bathroom area is (3.80) m ² in case of a shower cubicle only, or .(4.00) m ² in case of a shower + bathtub in the bathroom	

2. In Resorts (no resort classification is less than Three-stars)

Table No. (25) shows minimum net area for resorts, including bathroom area and does not include the balcony and room entrance

Resort Rating		Room Type	Minimum Room Size (with bathroom)
1	Three-star Resort	Single Room	m ² (20)
		Double Room	m ² (22)
		Suites	m ² (32)
		Minimum bathroom area including a shower is (3.50) m ²	
2	Four-star Resort	Single Room	m ² (26)
		Double Room	m ² (28)
		Suites	(42) m ² , not including living room
		Minimum bathroom area is (3.50) m ² in case of a shower only, or (3.80) m ² in .case of a shower + bathtub in the bathroom	
3	Five-star Resort	Single Room	m ² (33)
		Double Room	m ² (36)
		Suites	m ² (52)
		Minimum bathroom area is (3.80) m ² in case of a shower only, or (4.00) m ² in .case of a shower + bathtub in the bathroom	

3. In a Motel, Net Area of rooms must not be less than the following:

Table No. (26) shows minimum net area for motels including bathroom area and does not include the balcony and room entrance

	Room Type	Minimum Room Size (with bathroom)
1	Single Room	(9) m ²
2	Double Room	(11) m ²
3	Minimum bathroom area including a shower is (3.50) m ²	

Each room in the motel must have a separate private bathroom.

4. In a Hotel Apartment, Net Area of rooms must not be less than the following:

Table No. (27) shows minimum net area for hotel apartments

	Space Type	Standard Hotel Apartments	Luxury Hotel Apartments
1	Studio which includes (living area, bed area and open kitchen only) excluding bathroom and entrance hall	(17) m ²	(20) m ²
2	Living Room	(15) m ²	(20) m ²
3	Bedrooms Main Bedroom	(15) m ²	(16) m ²

Space Type		Standard Hotel Apartments	Luxury Hotel Apartments
	Additional Bedroom	(12) m ²	(12) m ²
4	Toilet	Minimum bathroom area is (3.50) m ² in case of a shower only, or (4.00) m ² in case of a shower + bathtub in the bathroom.	Minimum bathroom area is (3.80) m ² in case of a shower only, or (5.00) m ² in case of a shower + bathtub in the bathroom
5	Kitchen	(6) m ² , while providing suitable space for cooking for the unit's occupants.	

- Thickness of the walls separating the hotel units from each other and between them and the public corridors must not be less than (20) cm, and the thickness of all the external walls of the buildings must not be less than (20) cm.

14.7 Corridors

Clear width of public corridors in hotel establishments must not be less than (1.80) m.

14.8 Loading/ Unloading Spaces

(2) places for Loading/ Unloading must be provided for touristic facilities and hotels as a minimum, provided that requirements mentioned in clause (15.10) of article (15) of this regulation are applied.

14.9 General Requirements

1. Obtaining preliminary approval from Ras Al Khaimah Tourism Development Authority, as a requirement for obtaining a building permit for any hotel facilities, according to hotel facilities classification system approved by Ras Al Khaimah Tourism Development Authority.
2. Consultant Engineer shall refer to the requirements issued by Ras Al Khaimah Tourism Development Authority regarding classification criteria for hotels prior to starting the preparation of the design for any hotel facility.
3. Number of rooms should not be less than (30) rooms in hotels, (100) rooms in resorts, (10) rooms in motels and rest houses, and (20) apartments / studios in hotel apartments.
4. Requirements for elevators in article No. (39), and requirements for People of Determination in article No. (32) of this regulation must be taken into consideration.

14.10 Security & Safety Requirements

1. Security and safety means must be provided according to the conditions approved by the Concerned Department.
2. Self-illuminated guiding signs must be placed in all corridors, stairs, halls, entrance halls and public usage spaces to guide to the emergency exits (e.g. stairs and exits). It is not allowed to place any materials, barriers, or obstacles that might obstruct the exit movement .
3. Diagrammatic plans must be placed on the backside of the door of each guest room showing the locations of the exit stairs and the directions to them in the event of fire.
4. Fire Extinguishers must be placed in a clear and easily accessible place, with guiding panels provided for them, and any barriers. It is not allowed to place any materials, barriers, or obstacles that might obstruct the using of fire extinguisher.

Fourth: Industrial Buildings Requirements

Article (15): Industrial Facilities (Warehouses - Workshops - Factories)

15.1 Location

It is permitted to establish industrial facilities in the authorized areas for such usage and according to the map attached to land use classification and codification system in the Emirate.

15.2 Built up Ratio

1. Planning requirements issued by the Concerned Department shall be applied, and if it is not mentioned, then built up ratio must not be more than (50%) of the plot area.
2. Built up ratio shall not be less than the following unless otherwise stated in the “Land Allocation Decision” of the plot or if the nature of the usage requires otherwise:
 - For warehouses, (30%) of the plot area.
 - For workshops, contracting sites and transportation sites, (10%) of the plot area.
 - For factories, (18%) of the plot area.
 - For labor accommodation, (15%) of the plot area.
3. It is permitted to establish different buildings within the plot, each building can have different activity as per the mentioned activities in the previous paragraph, provided that the built-up ratio for each activity in proportion to the overall industrial building shall not be more than the following:
 - For warehouses, (25%) of the industrial building's area.
 - For workshop, (25%) of the industrial building's area.
 - For offices serving the industrial activity, (15%) of the industrial buildings' area.
 - For showroom displaying the factory product only, (10%) of the industrial buildings' area.
 - For labor accommodation, (25%) of the industrial buildings' area, and in proportion to the volume of industrial activity.

However, the total area of all buildings shall not exceed the allowable built up area of the overall plot.

4. Built up ratio, building heights and offices' spaces for large factories and uses of a special nature shall be applied according to the nature of uses and the planning conditions at time of plot allocation.

15.3 Setbacks

1. Industrial buildings setbacks shall be applied according to the planning requirements issued by the Concerned Departments.
2. Buildings' setback from the street must be not less than (3.00) m, and from the neighborhood and other boundaries must be not less than (3.00) m to allow sufficient routes for emergency vehicles and civil defense facilities. It is not permitted to build directly on the boundary of the plot.

- Internal setback between buildings or facilities shall be at least (3.00) m. to allow sufficient routes for emergency vehicles.

Table No. (28) shows Setbacks of Industrial Buildings on the street, neighborhood and other borders

Building Type	Setbacks	
	Street	Neighborhood & Other Borders
Industrial Buildings	(3.00) m	(3.00) m
* Determined setbacks for industrial buildings are applied in accordance with civil defense requirements.		

15.4 Levels and Heights

- Level of the ground floor finish must not exceed (1.20) m from the approved design level.
- Clear internal height of any warehouse, workshop, or factory and its services shall not be less than the following:

Table No. (29) shows minimum Clear Internal Height for Industrial Buildings and their blocks

Uses	Minimum Clear Height	Maximum Clear Height
Industrial Usage and Workshops	(4.50) m	(7.00) m
	Maximum height can be exceeded if some special industrial projects require certain heights.	
	- Except for Uses that require more heights. (Provided that the consultant submits a study clarifying the justifications for requesting the increase in height)	
Commerical Usage or Branch Offices	Height of ground and mezzanine floors shall be in accordance with table No. (13) of article (10) of these regulation regarding height of commercial and office Uses.	
Labor Housing (if any)	Labor housing requirements mentioned in Article No. (8) of this regulation shall be applied.	
Utilities Block	(3.00) m	(4.50) m if there is Utility Track

15.5 Mezzanine Floor

It is permitted to construct a mezzanine floor inside the warehouses, workshops or factories within the its height, provided that its usage is attached to the ground floor and its entrance is from within the ground floor itself. It is not permitted to have a separate entrance to the mezzanine.

15.6 Boundary Walls

- Boundary walls must be constructed on the boundaries of the plot from all sides, provided that their height are not less than (1.80) m and should not exceed (4.00) m, with the necessity to paint these walls in a way that does not distort public appearance, except the plots that are subject to special requirements. The width of the main entrance of the boundary wall must not be less than (6.10)

meters. The Concerned Department may approve special architectural designs for front boundary walls.

2. Item (8) of clause (6.8) shall be referred for level differences at plot limit.

15.7 Car Parking

Parking lots must be provided within the plot limit at a rate of one parking / (70) m² of the net area of the offices or the attached permitted showroom (not including corridors and various services).

15.8 Areas and Dimensions of Spaces

1. International standards and specifications for areas and dimensions of spaces shall be applied for the required industrial activity.
2. First aid / health isolation room of not less than (12) m² must be provided.

15.9 Sanitary Rooms

Minimum sanitary spaces shall be provided are as follows:

Table No. (30) shows minimum sanitary spaces that must be provided for industrial buildings

Type	Minimum Sanitary Spaces
Warehouses & Workshops	A toilet and washbasin should be provided for every warehouse or workshop. In the case of combined services, a toilet and washbasin must be provided for every (450) m ² for the first ten thousand (10.000) m ² of t building area, then a toilet and washbasin for each (1,400) m ² following the first ten thousand, provided that the washbasins are outside the toilet.
Labor Housing	Sanitary rooms requirements for labor housing stipulated in article No. (8) of this regulation shall be applied.

15.10 Loading/ Unloading Spaces

1. Places for loading and unloading must be provided in all industrial facilities, including warehouses and workshops, provided that the Minimum Area is as follows:
 - (4.50) m width X (6.00) m length for one warehouse or workshop only.
 - (6.00) m width X (9.00) m length for two warehouses or workshops.
 - (9.00) m width X (9.00) m length for more than two warehouses or workshops.
2. The same applies to loading and unloading spaces, what applies to entrances and parking lots, as stated in article (30) of this regulation
3. Loading and unloading spaces may be covered or uncovered, and in case it is covered, then net height of the entrance and the Ceiling must not be less than (4.50) m.

15.11 General Requirements

1. Environmental conditions stipulated in article (33) of this regulation must be applied to the usage whose storage or application results in harm to the surrounding environment. The consultant must observe the conditions of public security and safety and refer to the relevant authorities in this regard to obtain their approval.
2. A utility block is permitted to be set up in a linear format, a guard room is allowed on the main boundary wall, also an electricity room is allowed to be placed on the main boundary wall.
3. Natural ventilation and lighting must be provided at a rate of not less than (5%) of the floor area of any warehouse, workshop or factory. If there are offices attached to the industrial establishment, this percentage shall be not less than (10%) of the floor area of the offices.
4. It is permitted to establish a commercial showroom for the purposes related to the industrial activity established on the plot.

Fifth: Other Buildings Requirements

Article (16) Masjids (Mosques)

16.1 Built up Ratio

Built up ratio shall be applied according to the planning requirements issued by the Concerned Department.

16.2 Setbacks

Masjids setbacks shall be applied according to the planning requirements issued by the Concerned Department. In case they are not mentioned, the following applies:

Table No. (31) shows minimum setbacks for mosques and their blocks towards streets, sikkas & the neighborhood

	Building	Setbacks from Plot Boundary			Setbacks from Buildings	
		Street	Other Boarders	Neighborhood	Mosque	Blocks & Services
1	Masjid	(1.50) m			0	(3.00) m
2	Block Accommodation for Imam, Mu'azzin - Masjid worker	(1.50) m	(1.50) m	(1.50) m	(3.00) m Not allowed to open windows towards the masjid	(3.00) m From other blocks and services
3	Utilities Block (Toilets – Ablution)	N/A (Provided that service windows are not opened towards the streets, sikkas and neighborhood)			(3.00) m	(3.00) m
4	Electricity Room	N/A	N/A	N/A	(3.00) m	(3.00) m
(The Concerned Department may agree to reduce setbacks for special considerations)						

16.3 Levels and Heights

1. Level of the ground floor finish must not exceed (1.20) m from the approved design level.
2. Minimum internal clear height of the mosque must be in proportional to the capacity of the mosque's prayer hall (it does not include the false ceiling and according to the size and dimensions of the mosque main hall). A minimum of (4.50) m clear height of the prayer hall and a maximum limit according to the design and area of the mosque. The minimum clear height of the mosque services spaces is (3.00) m and the maximum is (4.00) m.
3. Minimum height of the minaret shall be equal to three times the height of the mosque main hall as shown in figure (13), and proportional to the area and height of the mosque main hall.

4. If there is a mezzanine inside the mosque hall, its clear height shall not be less than (2.50) m and not more than (3.50) m. In this case, the clear height of the ground floor below the mezzanine shall not be less than (3.00) m.
5. The height of the roof parapet shall not exceed (1.50) m above the finish level and the different insulation layers of the roof unless there is an architectural aesthetic needed and according to the approval of the Competent Department.
6. Avoid using any graphics or decorations that contradict Islamic law (Sharia), and it is preferable to be geometrically abstract and at level higher than (1.80) meters, so that the prayers will not be distracted with them.

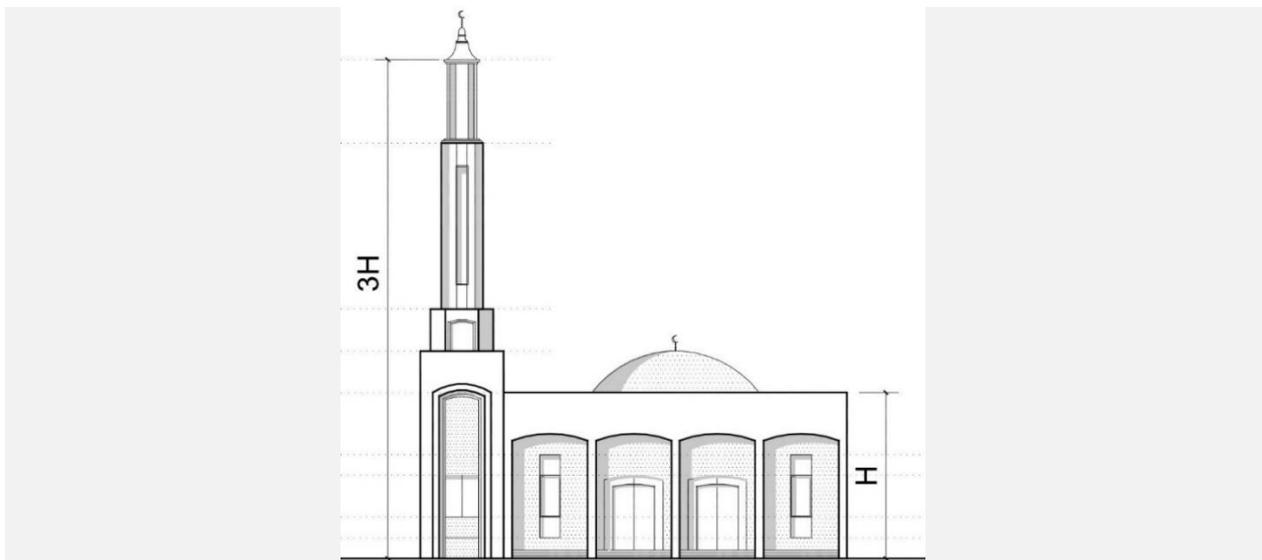


Figure No. (13) shows minimum height of the minaret in proportion to the height of mosque's main hall

16.4 Minarets, Domes and Mihrab

1. A minimum of one "Minaret" shall be provided for mosques which have capacity of more than (100) prayer, and the height of the minaret shall not be less than (25) m. It must have the enough number of openings and glass windows to achieve adequate lighting inside the minaret. The minaret shall has its own entrance.
2. The minaret should be acted as a landmark feature of the urban space surrounding the mosque. The design of the minaret should be consistent with the local Islamic architectural style approved by the Competent Department.
3. A main dome must be provided for the mosque while allowing multiple domes, provided that architectural harmony is achieved.
4. A "Mihrab" room and a rear entrance shall be provided for the "Khatib", in mosques with a minimum capacity of (400) prayers.

16.5 Mezzanine Floor

It is permitted to provide a mezzanine inside the mosque block outside the main prayer hall. The same conditions stipulated in item (4) of clause (16.3) of this regulation shall apply to it.

16.6 Boundary Walls and Entrances

1. It is preferable to construct an external boundary wall surrounding the mosque on the border of the designated plot with a suitable height of not more than (1.50) m, and that its half is solid and the upper half is hollow with the ratio of (1) solid: (2) hollow.
2. It is allowed to have a boundary wall surrounding the residence of the “Imam” and “Muezzin”, its height shall be not more than (2.50) m, to achieve proper privacy. The residence of Imam and Muezzin must be separate and far from the mosque and its main entrance. It is also allowed to provide private entrance for them towards the outside and another entrance towards the mosque.
3. It is allowed to make pedestrian entrances to the Mosque from all sides overlooking the roads and sikkas, and it is also allowed to provide a main gate for cars, and shall be able to allow the entry of emergency vehicles whenever needed.
4. Item (8) of clause (6.8) shall be referred for level differences at plot limit.

16.7 Car Parking

1. Number of parking lots shall be determined according to the following table (based on number prayers):

Table No. (32) shows minimum number of cars required for mosques

Minimum Number of parking Lots		
Minimum	Number	of
Parking		
Lots		
		One parking lot per (20) prayers, parking lot for Imam and Muezzin (if there is accommodation for them) + Parking lot for People of Determination as per table No. (51) of Article No. (32) of this regulation.
Charging Stations for Electric and Hybrid Vehicles must be provided in accordance with the requirements set out in item (403.03) and table No. (15) of Ras Al Khaimah Green Building Regulations “Barjeel.”		

2. The Competent Department may reconsider the number of parking lots required for mosques if there are public parking lots for the mosque, or if a small plot allocated to the mosque or in the event of a replacement for an existing old mosque.

16.8 Areas and Dimensions of Spaces

Areas and dimensions of spaces of mosque must not be less than the following:

1. The area designated for prayer is calculated including all the covered areas, which include main and secondary prayer halls, entrance, and the outer covered exterior (Liwan), and it does not include the uncovered areas or the spaces outside the mosque’s space, and the number of prayers is calculated on the basis of (1.00) m² per person.

2. A Store room attached to the Mosque must be provided with an area of not less than (6) m², according to the approval of the Concerned Department.
3. Mosques are allowed to add some secondary uses after the Relevant Entity approval, such as multipurpose hall at a minimum (30%) of the mosque’s area, a library with a minimum area of (30) m², and a room for electrical, mechanical and plumbing equipment. It is also allowed to add some commercial activities, subject to the approval of the Concerned Department.
4. For mosques that accommodate more than (600) prayers, it is allowed to add zones (classes) for reciting the Holy Qur’an, with a minimum classroom area of (15.00) m², and a minimum width of (3.60) m.

16.9 Doors

Number of doors depends on the capacity of the mosque, according to the following table:

Table No. (33) shows minimum number of doors in the main façade of the mosque

	Mosque Capacity	Number of Doors in Main Façade of the Mosque
1	200 prayers or less	(2) Doors
2	201-400 prayers	(3) Doors
3	401-700 prayers	(3) Doors
4	701-999 prayers	(4) Doors
5	1000 prayers and more	(3) Doors on Main Façade & (2) Side Doors

16.10 Projections

Projections shall be applied according to the planning requirements issued by the Concerned Department.

16.11 Sanitary Rooms

1. When designing mosques, the following service spaces must be provided according to the type of mosque, its location, and number of prayers.

Table No. (34) shows minimum mosque services spaces according to mosque capacity (number of prayers)

Mosque Capacity (Prayers No.)	Toilets (Minimum)	Washbasins (Minimum)	Ablution (Minimum)	Accommodation (Minimum)
Up to 200	One Toilet / 50 Prayers	One Washbasin/ 100 Prayers	One Ablution Unit/ 40 Prayers	Imam and Worker
201-350				
351-600				
601-1000				Imam- Muezzin and Worker
+ 1000				Imam- Muezzin and Worker

- Minimum Sanitary Rooms that must be provided in Female Prayer Hall shall be as shown in the following table:

Table No. (35) shows minimum number of Services Spaces in Female Prayer Hall

Female Prayer Hall Capacity (15%) of Total Prayers Number	Toilets (Minimum)	Washbasins (Minimum)	Ablution (Minimum)
30-50	One Toilet / 25 Prayers	1	1
51-90		2	2
+90		3	3
Highways Female Prayer Hall	1	1	1

- It is preferable for the toilets to be separated from the mosque building itself and have a separate entrance, and not to the direction of the Qiblah in line with Islamic Sharia. It is preferable to be in the southeast corner, taking into consideration that at least half of the toilets are of eastern (Arabic) Type. A suitable room attached to the toilets of not less than (1.50 x 2.00) meters shall be added to store cleaning tools.
- Ablution should be provided as an essential part of the mosque.

16.12 General Requirements

- The approval of any other authority identified by laws or decisions or The Competent Department shall be obtained before making any changes to the mosque.
- The dimensions of mosques must be designed in accordance with the standard specifications and dimensions approved by the Concerned Department, taking into consideration the requirements and conditions that are in line with the Islamic Sharia, and taking into consideration the proportionality of the mosque’s capacity with the allocated plot.
- The facade design of the mosque shall take into consideration the Islamic cultural identity, local architectural style and the choice of harmonious colors that are consistent with the surrounding environment.
- The design and supervision shall be done by Muslims with good experience in Islamic architecture, and the project manager of the consultant and the Contractor are Muslims.
- It is preferable that the main hall of the mosque be rectangular, with the longest side facing the Qiblah. It is not preferable to make openings on the side where the Mihrab is located, and it is preferable to avoid having columns in the main space of the mosque to maintain the continuity of the prayers’ rows, and to coordinate the general site in order to allow a yard behind the mosque.
- It is permissible for mosques to have an open external courtyard, and an external covered Liwan at the entrances as part of the mosque. A place is designated for placing the cold water refrigerator, as well as a covered place for placing prayers’ shoes.

7. A Female Prayer Room must be added in the mosques within the main mosque block. It shall be separated from the male’s prayer hall, and it shall have its own entrance and exits.
8. Vertical extension is permitted in the absence of sufficient space and is subject to the approval of the Concerned Department.
9. Needs of People of Determination and elderly prayers must be taken into consideration in the design of the prayer hall and entrances (providing appropriate slopes and corridors, toilets, etc.) in accordance with the requirements mentioned in the article (32) of this regulation.
10. The entrances and circulations of prayers to and from the mosque must be studied in order to achieve complete separation of entrances, circulation and ease of use of ablution for both genders without circulation interference.
11. The materials for the exterior and interior finishes of the mosque must be of materials and varieties suitable for the dignity of the mosque and suitable for heavy duty.
12. Providing sanitary rooms for male and female prayer rooms in commercial centers whose area exceeds (900) m² according to the number of prayers and according to tables No. (34) and (35).
13. Signboards indicating all entrances, circulation directions, and available service spaces in the mosque must be provided.
14. Quran shelves should be included in the design of the internal walls of the mosque.
15. Maximum number of prayers and the size and shape of the mosque space must be taken into account when designing the air-conditioning system, the lighting, sound system inside the mosque space, and the acoustics system. The sound system must be designed by specialist.
16. The Concerned Entity determines the elements of Imam, Muezzin, and worker Accommodations, and if these elements are not specified, the following table applies:

Table No. (36) shows minimum housing elements for imam, muezzin, and worker.

	Bedroom	Living Room	Kitchen	Bathroom
Imam Housing	2	1	1	1
Muezzin Housing	1	1	1	1
Worker Housing	1	N/A	Pantry	1

Article (17) Educational Buildings

17.1 Location

1. The location of the school, kindergarten or nursery shall be in the authorized areas for such usage and according to the map of land use classification and codification system in the Emirate. It is not permitted to use the site for any non-educational activity.
2. The site should be in a suitable location in relation to the neighborhood or residential area in terms of ease of transportation and the safety of students to access it.
3. The proposed site should be able to accommodate the school building, its playgrounds, its car parking and is buses parking according to the standards and requirements.
4. It shall be away from noise, environmental pollution sources, highways and hazardous areas.
5. It shall be easy to have the necessary services (roads - electricity - water -telephone- etc.).

17.2 Built up Ratio

The built up ratio shall be applied according to the planning requirements issued by the Concerned Department.

17.3 Setbacks

Setbacks shall be applied according to the planning requirements issued by the Concerned Department.

17.4 Levels and Heights

1. Level of the ground floor finish must not exceed (1.20) m from the approved design level.
2. Minimum and maximum clear height of educational buildings shall be according to the following:

Table No. (37) shows minimum and maximum clear height of educational buildings (private schools)

Uses	Minimum Clear Height	Maximum Clear Height
Shools & kindergarten	<ul style="list-style-type: none"> ▪ (4.00)m for classrooms, activity rooms and laboratories exluding false ceilings . ▪ (3.00) m for other spaces 	(5.50) m

17.5 Roof Floor

Roof floor is limited to service rooms only (e.g. elevator room, water tanks, central air-conditioning equipment, etc.), and as per the ratios and conditions mentioned in the article No. (25) of this regulation.

17.6 Boundary Walls and Entrances

- A wall must be built on the boundaries of the plot from all sides, with a minimum height of (1.60) m.
- Entrances of students' accommodation and staff accommodation within universities shall be separated from the other entrances.
- Item (8) of clause (6.8) shall be considered for level differences at plot limit.
- Providing (2) entries for maximum each (500) students.

17.7 Car Parking

1. Parking lots must be provided within the boundaries of the plot, according to the following Table: Table No. (38) shows number of parking lots required for educational buildings (private schools)

Use	Detail	Minimum Parking Lots
Schools & Educational Buildings	For every class	1
	Each (45) m ² of net area of administrative spaces	1
	For every (3) Classes	One Bus (1)
Students Hostel	For each (5) rooms or (46) m ² of Net Floor Area _ whichever is more_.	1
People of Determination Parking	Number of required cars parking is determined according to Table (51) in article (32) of this regulation.	

2. Car parking lots and buses parking outside the school plot must be approved by the Concerned Department.
3. Cars and buses are not allowed to enter inside the student or children's yards, their entrances and tracks must be separated from the movement of students or children, and the bus entrances are separated from the vehicle traffic lane.
4. The complete separation between vehicle and pedestrian traffic, courtyards and playgrounds shall be taken into consideration.

17.8 Areas and Dimensions of Spaces

Areas of educational buildings (private schools) must not be less than the following tables:

Table No. (39) shows minimum areas and dimensions of educational spaces (private schools)

#	Space	Minimum Area in m ²
1	Classroom for 25 Students	50 m ²
2	Multi-purpose Hall(s)	It can accommodate (50%) of the school's students, and its area shall not be less than (200) m ² .
3	Computer Lab	(60) m ² , One Computer Lab/ (20) Classes.
4	Science Lab (Primary)	(50) m ² , in addition to a preparation room and a storeroom, a lab for each (10) classes and minimum of (2) Labs.
5	Science Lab (Chemistry - Physics - Biology - Geology) (Secondary)	(60) m ² , in addition to a preparation room, a store with a capacity of (9) m ² . Chemistry laboratory shall be attached to a storage room for storing chemicals with a capacity of (9) m ² and a preparation room. One Lab/ (10) classes, with a minimum of (3) Labs.
6	Library	50 - 70 m ² for elementary and preparatory stages Or a Learning resource center in secondary stage with an area of not less than (100) m ²

#	Space	Minimum Area in m ²
7	Multi-Purpose Hall or more than one hall	(50)% of the school's students, and its area is not less than (200) m ² .
8	Summer Activities Rooms	60 m ² , with an average of one activity room for every (10) classes, and no less than two rooms.
9	Staff or Supervisors Room	(12) m ² , and (4) m ² / employee. Number shall be proportional to the number of teachers and supervisors, their number is estimated at a rate of (1.50) times the number of classes.
10	Mosque or Prayer Room	(30)m ² , with a place for ablution attached to it or near one of the toilets. More than one prayer room can be provided in case of multi-gender schools.
11	Restaurant or Dining Hall	(50) m ²
12	Clinic or Doctor's Room	(12) m ²
13	Courtyards (Yards) and Playgrounds	It shall not be less than twice the area allocated for classes, with a minimum of (150) m ²

It must be taken into consideration that the areas required for each unit of the building are proportional to the increase in the number of students, provided that classes are allocated an area of (1.5) m²/ student for primary and (2) m²/ student for preparatory and secondary and kindergartens.

Table No. (40) shows minimum spaces for private schools labs following ministry curriculum in (2& 3) grades

#	Laboratory Type	Minimum Area in m ²
1	(Biology - Physics - Geology) Labs	120 m ² , including a preparation room and a storeroom of 12 m ² .
2	Chemistry Lab	120 m ² including a preparation room and an equipped store room for storing chemicals.
3	General Science Lab	86 m ²
4	Innovation Lab	60 m ²
5	Design and Technology Lab	168 m ²
6	Business Department Lab - Scientific Health and Safety Lab - Creative Media Lab - Projects Lab - Robot Lab	120 m ²
7	Computer Lab	60 m ²
8	Manufacturing Lab	200 m ²

17.9 Projections

Projections in educational buildings shall be applied according to the planning requirements issued by the Concerned Department, while following the provisions of article No. (23) of this regulation.

17.10 Sanitary Rooms

Minimum sanitary rooms that must be available in educational buildings shall be as follows:

Table No. (41) shows minimum sanitary rooms that must be provided in educational buildings.

Educational Unit		Sanitary Rooms	
1	Schools & Educational Buildings	Students	Providing toilets for students at the rate of One Toilet and Washbasin for each class (25-30) students. Providing chilled drinking water fountains distributed inside the wings and in shaded places in the yards
		Teachers & Staff	Providing toilets for teachers and staff at the rate of one toilet and washbasin for every (10) classes.
2	Kindergarten	Students	Providing toilets for children at the rate of (One) toilet and washbasin per class. sanitary equipment must be of appropriate sizes for children in accordance with the approved standards and specifications.
		Teachers & Staff	Providing toilets for teachers and staff at the rate of one toilet and washbasin for every (10) classes.
3	Nurseries	Students	Providing toilets at the rate of one toilet/ (2) children rooms.
		Teachers	Providing toilets for teachers at the rate of (one) toilet and washbasin for every (10) classes.
4	Others	People of Determination	Providing an equipped toilet in accordance with the standards set out in article (32) of this regulation.
		School Clinic	Toilet shall be provided.
		Watchman	Toilet shall be provided.
		Drivers	Providing toilets in drivers' rooms, with a minimum of a (one) toilet and a washbasin.
Toilets of different genders must be completely separated, from kindergartens to all stages.			

17.11 Corridors

Clear width of public corridors for educational buildings should not be less than the following table:

Table No. (42) shows minimum clear width of public corridors for educational buildings

Use	Corridors Clear Width	
Educational buildings (Schools, Institutes, Universities)	(2.50) m	(3.00) m
	One-way Classrooms & Activity Rooms	Two-way Classrooms & Activity Rooms

17.12 General Requirements

1. Obtaining initial approval of the design from the ministry of education, and if any amendment to any building in the school or future horizontal and vertical extension or staged construction, Initial

approval can be obtained from the Ministry of Education and it shall be valid for a period of (3) years, subject to the approval of the Concerned Department.

2. Spaces for schools, kindergartens and nurseries are designed in accordance with Ministry of Education's standards and the requirements mentioned in these regulations, and if they are not mentioned, then the reference is made to the approved international standard specifications.
3. All means of security and safety must be provided according to the requirements of Civil Defense.
4. All the building facilities shall fulfill health requirements specified by public health legislation in the Emirate, and it is not permitted to use wooden materials, asbestos or any construction material that might cause harm to public health.
5. A separate building shall be assigned for each educational stage or section and for each gender, starting from the fifth grade, and it is permissible for several stages or sections to share the use of the educational facility (e.g. laboratories - library - activities) without prejudice the conditions of separation between the genders.
6. Providing ventilation, natural lighting and air conditioning according to the approved standard specifications for all school elements - especially classrooms, laboratories and halls, or kindergarten or nursery, so that the building's lighting and ventilation openings are not less than (20%) of the floor area of the classrooms and (10%) of the area of administrative offices, and (5%) of kitchens and bathrooms.
7. Taking into consideration the direction of lighting so that it is to the left of the student and not opposite to the teaching board.
8. Barriers, handrails or parapets must be used on balconies, windows and opened corridors.
9. All laboratories in educational buildings must be equipped with exhaust fans or gas chambers for chemical experiments.
10. Providing an elevator suitable for the use of People of Determination, with the provision of ramps and with a ramp of not more than (1: 12) at the sidewalks and external stairs and areas of level changing inside the building and at the entrances to allow students to reach all parts of the building and its yards without assistance.
11. Providing adequate and appropriate service rooms (e.g. kitchen, stores, etc.).

12. General Requirements for Schools

- Each school stage is assigned a separate building or section for each gender, starting from the fifth grade, and it is permissible for several departments to participate in the use of the Educational Facility (Laboratories - Library - Activity Halls) without prejudice to the condition of separation between the genders.
- The school should include a library with an area proportional to the number of students.

- The school should include rooms for the school Department (e.g. associate manager , supervising director, secretariat, administrators, specialists, accountants), teachers' rooms with an area proportional to the number of students, and the number of teachers estimated at (1.50) teachers per class, with a special room to store examinations papers (Control Room).
- The school should include laboratories, computer rooms, and activity rooms in proportion to the number of students, and the laboratories shall be far away from the classrooms as possible.
- The school should include at least one canteen with (cafeteria or restaurant) with the necessary services like a store and an air-conditioned space for eating food or a dining hall with its facilities and proportional to the distribution and number of students, it shall also comply with the health conditions specified by public health legislation in force in the Emirate.
- Providing a playground for students in schools and kindergartens with an area not less than twice the area of the classrooms, it shall include a flagpole. At least (30%) of the area of the playground shall be shaded with materials approved by the competent authority.
- The school must include the necessary sports fields in accordance with the requirements of the Ministry of Education, and the school must include a hall for free activities (multi-purpose activities).
- The school should include a clinic consisting of at least one room for the school doctor and another one for the nurse with an attached examination room and separate toilet, provided that their area is complying with the health requirements specified by the health legislation in the Emirate.
- Gas tanks (if any) shall be on the ground floor and accessible from outside the building.

13. General Requirements for Kindergarten

- Kindergarten Building must be independent of the other educational stages. The classrooms should be on the ground floor only, and that can be waived in the event of technical reasons approved by the Concerned Department. In this case, safety and security requirements shall be taken into consideration to avoid various risks, and all required general specifications shall be applied.
- The number of students in the class must not exceed (25) students, and that each student shall be allocated an area of no less than (2) m².
- The kindergarten should include rooms for Department, teachers and supervisors in proportion to the number of students in accordance with the terms of the Ministry of Education and the conditions specified by the Concerned Department.

- The kindergarten must include a clinic consisting of at least (two rooms and a separate toilet) equipped with the most important medical equipment and necessary first aid for children, provided that its area is complying with the health conditions specified in the public health legislation in the Emirate.
- Providing an indoor air-conditioned gymnasium with a minimum area of not less than (100) m².
- Providing a learning resource room at a rate of (1.00) m²/ student, provided that its area is not less than (100) m².
- Providing a playground equivalent to twice the area of the classrooms, provided that at least (50) % of its area is shaded, as well as allocating part of the space for planting shrubs and flowers and placing appropriate toys for children with materials approved by the competent authority.
- Providing a dining hall for students at a rate of (1.50) m²/ student, provided that the times of the first and second kindergarten students' break are separated.
- The kindergarten should include at least one canteen.
- One of the kindergarten halls must be designated for free activities.
- It is not allowed to have a swimming pool for the Kindergarten section except in the event that the design is secured in a separate, safe and not connected to the classroom and under the supervision of a specialist.

14. General Requirements for Nurseries

- The nursery must be on the ground floor and include empty spaces that can be used for the activities of children. This can be waived in the event that there are technical reasons approved by the Concerned Department. In this case, the security and safety requirements shall be taken into consideration to avoid various risks.
- The building must include a clinic consisting of at least (two rooms and a separate toilet) equipped with the most important medical equipment and necessary first aid for children, provided that its area is complying with the health conditions specified in the public health legislation in the Emirate.
- The distance between each two beds in the nursery rooms should not be less than (1.00) meter.
- Providing a spacious, shaded, sand-covered and planted courtyard, and proportional to the number of children.

Article (18) Healthcare Buildings

18.1 Location

1. It is permitted to establish hospitals and clinics in the authorized areas for such usage and according to the map of land use classification and codification system in the Emirate.
2. Pharmacies, fitness centers, massages and slimming centers should be located in areas where commercial uses are authorized.
3. The distance between any pharmacy and the nearest pharmacy must not be less than (200) meters on a traffic road.

18.2 Built up Ratio

Built up ratio shall be applied according to the planning requirements issued by the Concerned Department.

18.3 Setbacks

Setbacks shall be applied according to the planning requirements issued by the Concerned Department.

18.4 Levels and Heights

1. Level of the ground floor finish must not exceed (1.20) m from the approved design level.
2. If the hospital is higher than (10) floors above the ground floor, it is permitted to provide a Service floor for mechanical, electrical services and similar, its clear height shall not exceed (3.00) meters, and not less than (2.40) meters, and it can be repeated every (10) floor after approval Competent Department.
3. Minimum and maximum height of healthcare buildings shall be according to the following table:

Table No. (43) shows the minimum and maximum net height of healthcare buildings

Use	Min. Clear Height	Max. Clear Height
Hospitals	According to its studies	
Pharmacies	3.50 m	4.50 m
Fitness, Massages & Slimming Centers		

18.5 Basement Floor

It is permitted to build basement floor of the hospital on the entire plot, provided that the basement roof level does not exceed the parts outside the boundaries of the ground floor according to the approved design and adheres to the specified clear height. Building outside the approved building limit is not permitted, and it shall be allocated for medical and service purposes of the hospital such as stores, kitchens, radiology rooms, file rooms, etc. Depending on the nature of the design and the excessive area can be used as parking with the application of the conditions approved in the article No. (30) of this

regulation regarding determining the dimensions of the parking, the ramps and width of the ramp leading to the basement floor.

18.6 Roof Floor

Roof Floor is limited to service rooms only (elevator room, water tanks, central air-conditioning equipment, etc. ...) and with the rates and conditions mentioned in article No. (26) of this regulation.

18.7 Boundary Walls

1. A wall must be built on the boundaries of the plot from all sides, with a minimum height of (1.60) m.
2. Item (8) of clause (6.8) shall be considered for level differences at plot limit.

18.8 Car Parking

Number of car parking shall be determined according to the following table:

Table No. (44) shows minimum number of car parking required for healthcare buildings.

Use	Detail	Min. Parking Lots
Hospitals	For each designated bed for patients	1
	If there are outpatient clinics attached to the hospital; one parking lot will be added for every (70) m ² of the total net area of the clinics	1
People of Determination Parking	People of Determination parking is determined as stated in table No. (51) in article (32) of this regulation.	

18.9 Areas and Dimensions of Spaces

18.9.1 Hospitals

1. Reception, patients waiting area and the main entrance hall shall not be less than (120) m²
2. Commercial activity area must not exceed (5%) of the building area of the ground floor, and it is allowed to be used as a pharmacy, flower shop, gift shop, cafeteria, optical store and other commercial activities required for hospitals.

18.9.2 Private Clinics

Clinic area must not be less than two rooms and a hall, where the area of each room must not be less than (12) m², taking into consideration that a separate room is allocated for treatment and separate waiting halls should be allocated for both genders (male and female).

18.9.3 Pharmacies

Pharmacy Area shall not be less than (28) m².

18.9.4 Fitness, Massages and Slimming Centers

1. A separate place and a small changing room should be allocated for both genders.
2. A designated rest space for usage after steam or sauna shall be provided, and it shall be away from air flows.

18.10 Projections

1. Projections in healthcare buildings shall be applied according to the planning requirements issued by the Concerned Department.
2. General requirements are referred to in article No. (23) of this regulation.

18.11 Sanitary Rooms

Minimum sanitary rooms that must be available in healthcare buildings are as follows:

Table No. (45) shows minimum sanitary rooms that must be provided in healthcare buildings

	Healthcare Unit	Sanitary Room
1	Hospitals	Sanitary rooms are provided to hospitals according to special studies and international specifications and standards. (Provided that the study is submitted for approval of the Concerned Department).
2	Private Clinics	The clinic must have at least one toilet.
3	Fitness, Massages and Slimming Centers	It shall be provided with toilets and bathtubs (showers) for both genders, with numbers commensurate with the area of the center.

18.12 Corridors

Clear width of public corridors of healthcare buildings shall not be less than the requirements of use, with a minimum of (2.40) m.

18.13 Loading/ Unloading Spaces

The requirements mentioned in clause (15.10) of article (15) of this regulation shall be applied.

18.14 General Requirements

18.14.1 Hospitals

1. Obtaining approval from the Department of Health and Medical Services is mandatory for obtaining a building permit.
2. The design and construction of the hospital must be done in accordance with the approved international standards for hospitals.
3. The areas of the spaces and their relationship with each other, the width of the corridors, the doors, the necessary electrical, sanitary and mechanical installations, and the materials used shall be studied in accordance with the types, specifications and sizes of the used medical equipment, the hospital must be provided with a backup generator.
4. The interior furnishings plans must be prepared to specify the types and sizes of devices and equipment used in the different sections.

5. Ventilation and natural lighting must be provided for patients' rooms, waiting rooms, offices and lounges, and mechanical ventilation must be provided in accordance with the approved standard specifications for other parts that do not have natural ventilation.
6. The intensity of lighting (natural or artificial) in all parts of the hospital must be in accordance with approved international standards.
7. The patients' rooms shall be as far as possible from the roads and car parking, and the wall shall prevent sound transmission from one room to another.
8. Waste rooms and means of handling and disposing of medical waste shall be provided in accordance with relevant specifications. Necessary procedures and approvals of the Concerned Department shall be taken.
9. The consultant must submit a full study of public and patient elevators, as stipulated in article (39) of this regulation.

18.14.2 Clinics and Pharmacies

- a. Obtaining the approval of the Department of Health and Medical Services as a condition for obtaining a building permit or decoration works permit.
- b. The floor should be made of smooth materials that are easy to be cleaned.

18.14.3 Fitness, Massages and Slimming Centers

1. Obtaining the approvals of the concerned authorities.
2. The building must have adequate health conditions in terms of lighting and natural ventilation.
3. The steam production space for saunas must be completely separated from the toilets.
4. Sports' equipment or tools that might cause structural stress on walls or roofs should not be installed, and only simple equipment may be installed provided that they are installed in a safe manner.
5. The gymnasium that produces noise or vibrations (karate, weight lifting, etc.) shall be on the ground floor or the mezzanine of the building, and its floors and walls must be equipped with sound-insulating materials.

Article (19) Wedding Halls

19.1 Location

1. The site must be designated for commercial use and suitable for the project's activity, and it is located on two intersecting roads, one of which is a main (commercial) and a secondary one, or the sites designated for this use.
2. The width of the road that the hall overlooks must be a minimum of (20) meters.

3. The area must not be less than (4000) m², and the length of the side overlooking the main street must not be less than (50) meters.
4. The distance between the site and the nearest hospital should not be less than (500) m from all sides.
5. The distance between the site and the nearest mosque must not be less than (250) m from all sides.
6. The distance between the wedding hall and another one should not be less than (500) m from all sides, measured from the external borders of the land.
7. It is necessary to take into consideration the construction of wedding halls to be far enough from fuel and gas distribution centers and similar places that may create a hazard. The project site shall be separated from these facilities with a secondary road whose width is not less than (25) m, or a plot from an approved scheme whose width is not less than (25) m.

19.2 Built up Ratio

Built up ratio shall be applied according to the planning requirements issued by the Concerned Department.

19.3 Setbacks

The building setbacks on the surrounding streets, neighborhoods, and other boundaries shall not be less than the permissible distances in the building system in the region, and not less than (3) meters.

19.4 Boundary Walls

1. A boundary wall must be built on the boundaries of the plot from all sides, with a minimum height of (1.60) m.
2. Item (8) of clause (6.8) shall be considered for level differences at plot limit.

19.5 Car Parking

1. One parking lot must be provided for each (20) m² of the hall Area + parking lots for People of Determination as stated in table No. (51) in article (32) of this regulation within the boundaries of the plot.
2. The parking spaces must be secured within an open yard or within a directly adjacent parcel that is used for parking in the event that the parking is not available within the boundaries of the plot on which the project is built, provided that the plot is merged with the project's land and it is prohibited to decommission the merger later, except in the case of changing the use for another activity that does not require this condition.
3. The design shall take into consideration the circulation study of cars entering and leaving the hall, and obtain the approval of the concerned authority on the design.

Article (20) Petrol and Fuel Stations

20.1 Location

1. It is permitted to construct petrol stations in the authorized areas for such usage and according to the map of land use classification and codification system in the Emirate.
2. It is not permitted to use the plots allocated to petrol stations for any other uses except for some secondary uses for car services and food and beverages shops and similar.

20.2 Built up Ratio

Built up ratio shall be applied according to the planning requirements issued by the Concerned Department.

20.3 Setbacks

1. Setbacks shall be applied to the establishments according to the planning requirements issued by the Concerned Department.
2. If the planning conditions do not mention the setback, the minimum setback for these establishments must be (3.00) m from the neighborhoods.
3. It must be taken into consideration that all petrol station's buildings are not less than (20) meters far from the fuel tanks, ventilation pipes, and pumps.

20.4 Levels and Heights

1. The level of the ground floor finishes of the buildings shall not exceed (1.20) m from the approved design level.
2. Heights of shops, service blocks, and offices, shall be applied as shown in table No. (18).
3. Other heights are subject to a special study provided to the competent authority.

20.5 Boundary Walls

1. A boundary wall must be built on the plot limits from all sides, with a minimum height of (1.60) m.
2. Item (8) of clause (6.8) shall be considered to for level differences at the plot limit.

20.6 Car Parking

Parking lots must be provided at the rate of one parking lot per (70) m² of the net shops area (mini-markets) and services that need parking, and it is taken into consideration that these parking spaces do not affect the circulation of cars inside the station.

20.7 Areas and Dimensions of Spaces

Areas and dimensions of spaces must not be less than the following:

1. The area allocated to car services, food and beverages shops and similar must not be less than (150) m².

2. A maximum of (3) rooms are permitted to be used for labors accommodation in all stations located outside the city, taking into consideration the areas and dimensions of residential spaces, as indicated in table No. (3). It is not allowed to used labors rooms in all stations located inside the city.

20.8 Sanitary Rooms

Minimum number of sanitary rooms that must be available are as follows:

Table No. (46) shows the minimum number of sanitary rooms that must be provided in petrol stations

Services	Minimum Sanitary Room
Station's staff	Number of toilets must be proportional to the number of workers, with a toilet and washbasin for every (20) workers and employees.
Public Service (Customers)	Toilets (Female/Male) must be provided so that they are separated from those designated for the station staff and include at least two toilets and washbasins for each in a suitable location.
Masjid Mosque	Requirements for sanitary room for Masjids (Mosques) set forth in clause (16.11) in article (16) of this regulation are referred to, with a minimum of a Toilet, a flushing toilet and a washbasin attached to the mosque.
Restaurant	Minimum one toilet and one extra washbasin.

20.9 General Requirements

1. The consultant must review the Environment Protection and Development Authority and the Wastewater authority in the Emirate to obtain initial approval before finalizing the designs and plans.
2. Security and safety conditions approved by Civil Defense Department in the Emirate must be provided, taking into consideration that the doors and windows are made of fire-resistant materials in accordance with the requirements of the Civil Defense Department, and that they are opened on the opposite side of the station away from the sources of danger.
3. Car wash and service stations must be equipped with the appropriate means and equipment for water drainage and filtration, such as sand sedimentation chambers, oil traps, and pumps to ensure water purification before connecting it with analysis tanks or the public network.
4. The consultant shall submit drawing plans for the general site layout of station, indicating the following:
 - a. The proposed entry and exit routes for the station and in relation to the road speed on which the station is located and the radius of the entry turnover approved by the Concerned Department.
 - b. All elements of the street standings within a distance of (500) m before and after the station site, including traffic signs, lighting poles, trees, manholes, pump rooms, electrical substations and similar.
 - c. The direction of traffic, the number of lanes, and the allowable speed limit.

Sixth: General Requirements

Article (21): Building Heights

1. The level of the ground floor finish of the buildings must not exceed (1.20) m above the approved design level (excluding residential villas and unless otherwise mentioned).
2. Building heights are determined starting from the approved design level for identifying the level of the ground floor finish, and according to the details of the building heights scheme of the Emirate, with the exception of buildings which have special exceptional decisions. In general, the maximum building heights are equal to the total floor heights according to the planning conditions (e.g. the allowed floor height for each floor according to the regulation and requirements) in meters plus the level of the ground floor.
3. Height of the roof parapet in buildings shall not be less than (1.00) m after the roof finishing and the various layers of insulation, and not more than (1.80) m, except in cases of architectural façades or in some buildings whose conditions needs otherwise and in accordance with the approval of the Competent Department.
4. Clear height of other buildings shall be, (including covered parking and other buildings) as the following table shows:

Table No. (47) shows minimum and maximum clear height for other uses

Uses	Min. Clear Height	Max. Clear Height
Covered Parkings	(2.50) m (Below structural beams and hanging service)	(4.00) m
Other Buildings	According to its studies	

5. Clear height of the internal and public corridors of other buildings that were not mentioned shall not be less than:
 - (2.70) m for residential buildings, labors' accommodation, office buildings and specialized buildings.
 - (3.00) m for commercial buildings, educational and healthcare buildings corridors.
6. For special considerations that characterize the nature of some buildings and architectural designs (e.g. showrooms, cinemas, schools, commercial centers, industrial spaces, and similar), it is permitted to exceed the referred heights in this article, or other articles of this regulation. It shall consider the standard specifications approved by the Technical Committee and the needs of the People of

Determination, taking into consideration the coordination of the heights of these buildings with the neighboring buildings.

7. For buildings where the maximum roof floor height is not mentioned (and it is allowed to have a roof floor) or basement; clear roof floor height shall not exceed (3.50) m, and not less than (2.70) m. The basement floor clear height shall not exceed (3.50) m and not less than (2.50) m.
8. Parts that are permitted to exceed the allowable height of buildings are determined as follows:
 - Decorative elements in general, including Minarets, domes, decorative and heritage towers.
 - Chimneys and smoke discharges, water tanks, elevator cores, stairs, radio and television antennas, cooling towers, pergolas, helipads and parts of roof parapet.
 - Commercial sign /landmark, provided that they comply with the regulations and conditions approved by the Concerned Department in this regard.
 - Trusses and domes can exceed the maximum building height and the maximum net internal heights subjected to fulfill the structural and aesthetic requirements.
 - It is required to permit exceeding height in the cases referred to in the previous paragraph, taking into consideration the followings:
 - No part of the facilities, buildings in which height is permitted shall be used for residential or commercial purposes. Sign boards shall be according to the heights permitted in the legislations regulating them.
 - The height must not exceed the necessary height to perform its function according to the decision of the Technical Committee, and it should not affect air traffic or create any harm to the neighborhood. The building, tower or crane must be provided with day and night light signs when the height exceeds (60) meters.
 - It is required to check the Civil Aviation Department in the Emirate in the event that the height of the building's tower or crane exceeds (60) meters, and to submit an aerial study proving that the building's tower or crane does not affect the safety of aviation in case its height is (147) meters or more.

Article (22): Setbacks

Setbacks for buildings shall be determined according to the planning requirements issued by the Concerned Department and land use classification and codification system in the Emirate. The setback is measured starting from the parcel limit.

1. Setbacks are applied starting from the ground floor of all buildings and according to the planning requirements.

2. Setbacks are determined from the plot limit overlooking the open areas such as Sikkas unless otherwise mentioned.
3. Setbacks of buildings, public buildings, or buildings that are not mentioned in the terms of this regulation shall not be less than (3.00) meters from all directions (unless otherwise indicated by the planning requirements issued by the concerned department), and the internal setback between the main buildings shall not be less than (3.00) m, unless otherwise indicated.
4. With the exception of the projections authorized in accordance with article (22) and clause (6.14) of article (6) of this regulation and the articles authorized for projection, and in accordance with the planning requirements, utilized projections in the setbacks are not permitted.
5. The setback for all buildings, regardless of their heights from the side of the cemetery, must not be less than (5.00) m.
6. When setbacks from the side of roads, sikkas, neighborhoods and other borders, the various service lines must be taken into consideration, and the structural design does not allow any structural elements to extend outside the plot limit.
7. A setback of not less than (1.50) m for swimming pools, underground water tanks, septic tanks and similar must be considered from the boundary walls or walls of any building.
8. A setback of not less than (1.20) m for caravans and temporary structures must be considered from the boundary walls and walls of any building, unless otherwise indicated.
9. Setbacks shall be considered in a manner that does not contradict with the planning requirements issued by the Concerned Department and land use classification and codification system in the Emirate.

Article (23): Balconies and Projections

1. Projection is permitted in accordance with building requirements issued by the Concerned Department.
2. It must not be permitted to project any balcony on a sikka or street with a width of less than (7.50) m or within the minimum boundaries of shafts, courtyards and setbacks. It is not permitted to make structural projections for retaining walls, bases and foundations of buildings and boundary walls outside the plot limit.
3. Unused aesthetic projection is permitted inside the plot in accordance with the following conditions:
 - An unused aesthetic projection of (0.30) m can be permitted, starting from the height of the ground floor window sill, and not less than (1.00) m above the approved design level.
 - An unused Aesthetic projection, with a maximum of (0.20) m, is permitted inside courtyards and shafts whose dimensions exceed (4.60 x 4.60) m².

- An unused aesthetic projection is permitted in corridors in accordance with article (36) of this regulation.
4. An unused aesthetic projection of the boundary wall ornaments is allowed towards the road only with a maximum of (0.30) m from plot limit , with a height not less than (2.50) m from the approved design level, and it is allowed to project the ornaments with a maximum of (0.15) m without this height. .
 5. No aesthetic projections or any construction works for buildings and boundary walls are allowed outside the plot within the neighborhood s' and other plot limits.
 6. The Competent Department may agree not to restrict the aesthetic projections if the technical committee approves the design of the presented building, provided that these aesthetic projections do not exceed beyond the plot limit.

Article (24): Pergolas and Car Parking Sheds

24.1 Pergolas

1. It is permitted to build pergolas around the buildings in the vacant areas of the plot and in the setbacks given that the cut off percentage shall be at least (50%) of the total area of the pergola and the height not to exceed (3.00) m.
2. It is permitted to build pergolas to cover swimming pools on the roof, provided that their setback shall be at least (1.50) m from the building boundaries and its projection shall not exceed (1.50) m from the pool edge, and its height shall not exceed (3.00) m above the pool level.

24.2 Car Parking Sheds

Car parking sheds permit request outside the parcel in all areas of the Emirate is subject to study and approval of the Competent Department.

Article (25): Basement Floor (Underground)

Unless otherwise mentioned for basement floor construction, the following general requirements shall be followed:

1. Minimum clear height of the basement should be (2.50) m, and it does not include the height of the service space.
2. It is permitted to build the basement floor on the entire plot, provided that the external parts of basement roof level do not exceed the approved design level and complying with the approved clear

height. Building outside the approved building limit is not permitted, provided that its use is limited to building services (stores - kitchens - car parks ...), with the implementation of the requirements of article No. (30) of this regulation regarding the determination of the car parking's dimensions, the inclinations and the width of the access ramps to the basement floor, except in the case of labor and staff accommodation within industrial areas, basement construction shall be on the area of the ground floor only.

3. The basement area is not counted from the permitted built up ratio, and it is permitted to construct more than one basement for car parking, except for residential and investment villas, and labor accommodation, where only one basement floor is allowed.
4. The basement floor shall not be used for housing, offices or commercial purposes. The basement floor shall not be used separately from the main building function, and its use is restricted only to the following service purposes:
 - Car parking and building services (e.g. electricity, communication, water tanks, pumps, etc.).
 - Special services for residents (e.g. washing room, drying clothes, swimming pool, health club and the services attached to them, children's play area, sports tools, etc.).
 - Special services for specialized buildings such as hotels and hospitals (e.g. kitchens, services, etc.).
5. Providing ventilation and lighting in basement floors in accordance with the requirements mentioned in articles (27 & 28 & 29) of this regulation.
6. It must be taken into consideration that no part of the basement floors or its foundations extends beyond the plot limit or outside the approved building limit from the road side. All the necessary accesses to the basement, including entrances and ramps, must be within the boundaries of the plot, and no part of it is allowed to be constructed outside the plot limit.
7. Shoring works during deep excavation must not be projected into the neighboring plots, unless obtaining a written NOC letter from the owner of the neighboring plot, as well must not be projected outside the plot limit in roads, sikkas and open areas unless otherwise exempted from Competent Department and after submitting its structural design to the Competent Department and the approval of the Relevant Entity, taking into consideration the provision of all safety conditions for neighborhood facilities during dewatering, excavation, piling works and construction of basement floors. The basement must be water proofed to avoid any risk of water leakage into the basement regardless the water source, and providing means for water drainage while adhering to the approved technical specifications.
8. The basement floor must be provided with the necessary means and equipment for water drainage.

Article (26): Roof Floor

Unless otherwise mentioned for roof floor construction, the following general requirements shall be followed:

1. The roof floor is designated for building elevator equipment rooms, stairs, water tanks, pump rooms, electricity, communications services, air-conditioning equipment, some aesthetic canopies (Pergolas) and other service uses approved by Concerned Department. Residential rooms are not permitted to be built on roof except on the roof floor of private and investment Villas.
2. The constructed area shall not exceed (35%) of the total area of the last floor, this area shall include all constructions on the roof floor. Its structure shall be of reinforced concrete or similar, and its setbacks shall not be less than (1.50) m from the front limit of the building.
3. The height of roof parapet in buildings should not be less than (1.00) m above the final finish level and the various layers of insulation, and not more than (1.80) m, except in cases of architectural façades or in some buildings whose requirements need otherwise and in accordance with the approval of the Competent Department.
4. The locations of tanks, satellite dishes, and equipment such as air-conditioning equipment, facade cleaning equipment, and similarly must be identified on the roof floor. The detailed plans shall be provided to treat the architectural facades in a way that does not affect the general appearance, and to determine the appropriate height of the parapet according to the planning requirements.
5. It is permitted to place commercial sign boards on the roof in accordance with the conditions provided in the legislation regulating them.
6. It is not permitted to use structures which are built on the roof for any commercial purposes by any means.
7. Roof water or rain water is not allowed to be drained outside the plot limit.

Article (27) Natural Lighting and Ventilation Openings

27.1 Windows Requirements

1. Every room (residential or non-residential) and every staircase, kitchen, hall, or corridor must be provided with a lighting and ventilation opening. The total area of the lighting and ventilation opening shall not be less than (10%) of the residential rooms' space, (5%) of the area of the service spaces (e.g. kitchens, bathrooms, toilets, stores, and stairs).
2. It is permissible to provide ventilation and lighting openings in the roof as per the same mentioned ratios in the previous item, and provided that these openings are directly connected to the external

open air space, it is not allowed to provide these openings in sleeping spaces, and that the openings can be opened mechanically with a controller at a height of (1.00) m from the room floor level.

3. Ventilation and lighting openings must be provided in the main stairs of the building at each floor, starting from the first floor up to the last floor. With the exception of residential villas, ventilation and indirect lighting are allowed for the stairs. The Competent Department may, for technical reasons, allow mechanical ventilation and artificial lighting, subject to the approval of the Civil Defense Department.
4. Ventilation and lighting openings must be provided in industrial facilities such as warehouses and workshops with a percentage not less than (5%) of the floor area, warehouse doors are considered part of this ventilation and lighting. In the event that there is an offices' space attached to the industrial facilities; the percentage of ventilation and lighting openings for it shall not be less than (10%) of the office space area.

27.2 Doors Requirements

Minimum doors width shall be as per the following table:

Table No. (48) shows minimum doors width of architectural spaces

#	Architectural Spaces	Minimum Door Width
1	Stairs	(1.10) m
2	Main Door to Residential Units and Offices	(1.10) m
3	Bedrooms and Office Rooms	(1.00) m
4	Kitchens	(1.00) m
5	Bathrooms - Toilets	(0.90) m
6	Shops	(1.10) m
7	Workshops and Warehouses	(3.00) m
8	Patient Rooms in Healthcare Buildings	(1.20) m

Minimum door height is (2.20) meters

27.3 General Requirements

1. All rooms, lounges, corridors, stairs, kitchens and bathrooms of any building must be provided with natural lighting and ventilation specified in this article, as well as secondary ventilation or cross ventilation when the depth of the room exceeds three times its width.
2. When lighting and ventilation is required for any entrance or corridor through the rooms available to it, it must be added to the area of those rooms to determine the amount of ventilation needed.
3. Ventilation and natural lighting can be replaced by ventilation and artificial lighting for toilets, stairs, bathrooms, and small pantries (whose area is less than the minimum area of the kitchen), corridors,

lounges and rooms of some specialized projects that require this condition, provided that the requirements for mechanical lighting and ventilation are provided.

4. Kitchens may be part of the living room space provided that the required ventilation is provided in accordance with the provisions of this regulation for the living hall, and shall from the hall side opposite to the open kitchen, along with mechanical ventilation for the kitchen.
5. It is not permitted to make air or lighting openings in the neighbor side unless the required setbacks are achieved.
6. The following must be taken into consideration when providing openings in buildings:
 - Provide handrail or parapet in balconies and roofs, and at points of level difference and heights that exceed (1.00) m.
 - External doors in typical floors shall not open directly to the outdoor space or staircase steps.
 - The height of window sills shall be at least (1.00) m unless there are terraces or (balconies) in front of these windows or if the handrail are provided at a height not less than (1.00) m.
 - The consultant engineer shall study the height of the handrails in relation with the type and height of windows and balconies.
7. Any part of a window that can be opened or any door that it can be kept open is considered to be a light and ventilation opening.

In all cases, the opening must be connected to the open air space with its entire area, and therefore any opening associated with an automatic device (air conditioning device) shall not be considered a ventilation opening in accordance with the provisions of this regulation.

Article (28) Shafts and Courtyard

28.1 Shafts

Natural lighting and ventilation requirements for the spaces overlooking the shaft and the inner courtyard are as follows:

1- Baths/Toilets

Shaft area should not be less than (0.64) m² and its width not less than (0.80) m. Natural lighting and ventilation requirements can be waived if an integrated system for mechanical ventilation and artificial lighting is provided in accordance with the approved specifications.

2- Closed Kitchens

Shafts area should not be less than (7.00) m² and its width not less than (2.00) m regardless of the height of the building. Mechanical ventilation is required according to the approved specifications and conditions in case the building's height exceeds the (G+7 floors).

3- Open Kitchens

It is permitted to provide open kitchens in the halls without providing ventilation shafts for these kitchens and for all building heights, provided that their location faces the ventilation openings and the main lighting of the halls, with the exception of the villas (in the case of a main kitchen) with the provision of mechanical ventilation according to the approved specifications.

4- Preparatory Kitchens (Pantry)

Shafts Area shall not be less than $(0.64) \text{ m}^2$ and its width shall not be less than $(0.80) \text{ m}$, for any of its sides, otherwise mechanical ventilation shall be provided in accordance with the approved specifications.

28.2 Inner Courtyard

Internal courtyard area varies according to the condition of the rooms or offices overlooking it, as follows:

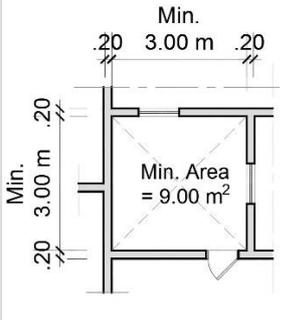
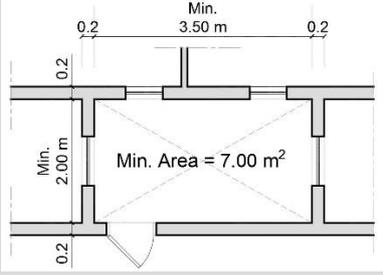
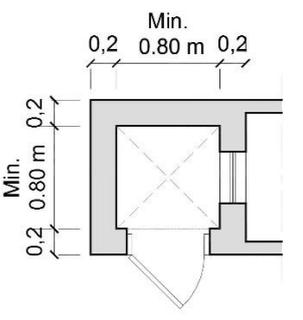
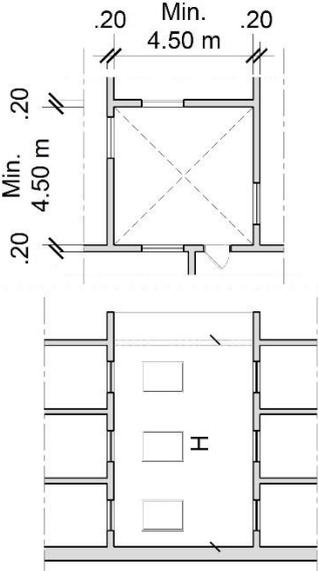
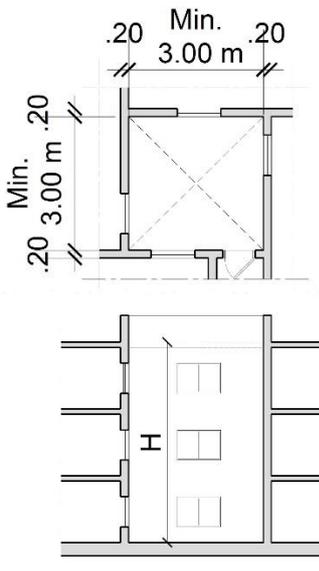
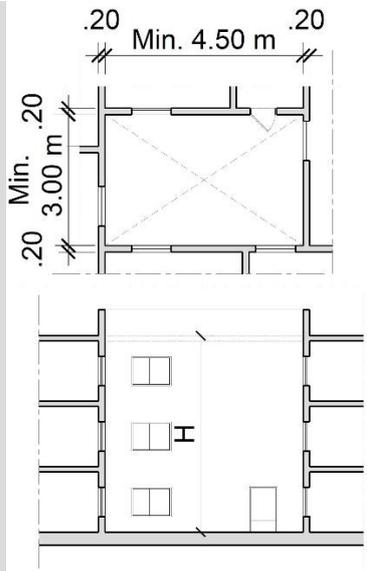
1. If all rooms of the residential unit or office get its lighting and ventilation from the courtyard itself, then courtyard area shall be at least square the half of the total height of the floors (e.g. $(H/2)^2$) in which these rooms are located from the ground of the first floor with a minimum of (4.50) meters for any of its sides and $(20.25) \text{ m}^2$ for the Area.
2. If some of the rooms overlooking the courtyard are part of an office or a residential unit while the rest of its rooms overlooking a road, sikka, courtyard or legal setback; then courtyard area shall be at least square the third of the height of the floors (e.g. $(H/3)^2$) in which these rooms are located with a minimum of $(3.00) \text{ m}$ for any of its sides and the total area shall be at least $(9.00) \text{ m}^2$.
3. If kitchen(s) of one or more residential units in one floor are overlooking the courtyard, or office units with a view of a street, a courtyard, a silkka or a setback; then the courtyard area shall be at least a $(1/2 \text{ height} \times 1/3 \text{ height})$ for the floors in which these rooms are located, beginning from the ground of the first floor with a minimum area of $(3.00 \times 4.50) \text{ m}^2$.
4. For apartments of more than $(150) \text{ m}^2$, natural ventilation and lighting of the maid's rooms can be provided through the shaft with dimensions not less than $(3.00 \times 3.00) \text{ m}^2$, whatever the height of the building with the condition of providing mechanical ventilation in accordance with the specifications and conditions approved by the Competent Department if the height exceeds $(G+7)$ floors) or from any other courtyard without affecting its measurements.

5. If rooms and kitchens are overlooking a light well, the dimensions of the maid's room Shaft applies with at least (3.00×3.00) m² of any side and the total area shall be at least (9.00) m², regardless the height of the building, provided that the mechanical ventilation shall be provided if the height exceeds the (G+7 floors) in accordance with the specifications and conditions approved by the Competent Department.

General Requirements:

1. Each internal courtyard or shaft in the building shall be provided with a suitable entrance (not less than 70 cm width) from its ground level for maintenance and cleaning purposes. Shaft shall be covered in a manner that provides access for maintenance and to avoid any accumulation of dirt's or insects.
2. Any internal courtyard or shaft shall be provided with the necessary rain-water drainage system.
3. Shafts walls thickness which separate it from the rest of the building spaces shall be minimum (20) cm.
4. It must be taken into consideration that all internal courtyard or shaft are exposed from the top, and if any roof is placed or constructed on them, the following conditions and requirements shall apply:
 - If the roof is transparent, side openings to the external space shall be provided with a total area for these openings at least equal to courtyard or shaft area.
 - If the roof is not transparent, side openings to the external space shall be provided with a total area for these openings at least 1.50 times courtyard or shaft area.
 - The roof may extend beyond the area of the courtyard or shaft to a distance not exceeding half the height of the side openings.
 - These openings must be provided with adequate means of opening and closing, and they must be covered with a protective net from rodents and birds.

Table No. (49) shows minimum dimensions and areas of shafts and courtyard.

Shafts		
		
Mechanical ventilation must be provided if the building height exceeds (G + 7 Floors).	Mechanical ventilation must be provided if the building height exceeds (G + 7 Floors).	Bathrooms/Toilets shall be provided with mechanical lighting and ventilation, according to the approved specifications and requirements
Min. Shaft Area = 9.00 m²	Min. Shaft Area = 7.00 m²	Min. Shaft Area = 0.64 m²
Maid's Room	Apartments above 150 m²	Prep. Kitchens (Pantry) or Baths/ Toilets
Maid/worker Room + Kitchen	Closed Kitchen	
Courtyard		
		
Min. Area = 20.25 m²	Min. Area = 9.00 m²	Min. Area = 13.50 m²
Area = (1/2 H)²	Area = (1/3 H)²	Area = (1/2 H × 1/3 H)²
All residential unit / office rooms that are overlooking it only	Some residential unit / office rooms that are overlooking it	Some bedrooms / Offices + Kitchens
Bedrooms / Office Rooms Or (Bedrooms / Offices) + Kitchens	Bedrooms / Office Rooms	(Bedrooms / Offices) + Kitchens
All rooms do not overlook the external space	Some rooms do not overlook the external space	Some rooms do not overlook the external space

Article (29): Artificial Lighting, Mechanical Ventilation and Central Air Conditioning

If it is not possible to provide natural lighting and ventilation in some buildings such as cinemas, halls, commercial centers, restaurants, specialized buildings and public and private building's Services, then it may be replaced by artificial lighting and mechanical ventilation, provided that:

1. These buildings must have a central air-conditioning system and electrical lighting in all parts of the building.
2. All designs for air conditioning work must be prepared by ensuring the provision of temperatures, relative humidity, level of purity and quantity of air, level of pressure differences, sound insulation, and vibrations insulation within the air conditioned spaces and conforming to the schedules and specifications of air conditioning and its approved system by the Competent Department and international specifications.
3. External air inlet must be far enough from any source of pollution, and a protection net must be installed to trap insects on the air inlet and at an appropriate height from the ground.
4. Air filters with an efficiency of no less than (99%) must be used in surgical rooms, serology laboratories, pharmaceutical factories and similar applications that require such condition. The filter must be connected with an appropriate alarm to warn of the need to change when its efficiency reaches its minimum limits.
5. Sound insulation boards/layer shall be used to isolate the noise created by air conditioning equipment, vibration isolation systems must be used to isolate vibration of machines so that it does not affect the structural safety of the building.
6. Area and specifications of shafts overlooking the kitchens with mechanical ventilation must be in accordance with the previous article related to the conditions of lighting and ventilation of the uses overlooking the shaft and inner courtyard.
7. The specifications and conditions set forth in the Green Buildings Regulations "Barjeel" approved by the Concerned Department regarding thermal insulation, specifications and calculations of ventilation, air conditioning and lighting, must be applied.

Article (30) Car Parking

30.1 General Requirements

1. Car parking must be available (covered or shaded) within the boundaries of the plot on which the building is built.

2. Number, dimensions, specifications and design of car parking must be in accordance with the standard regulations and specifications set forth in clause (30.2) of this Article.
3. No modifications may be made to the number, dimensions, specifications and design of car parking approved in the building permit before obtaining approval from the Competent Department. The Contractor and the Engineer shall be responsible for any change that has not been approved by the Competent Department, even if such modifications are technically acceptable. The owner shall be responsible for any modifications made after issuing "Building Completion Certificate" that have not been approved by the Competent Department.
4. The Competent Department may request the conduct of traffic impact studies for projects that lead to a significant impact on or increase the traffic (e.g. projects that are established according to special approvals, specialized projects, commercial centers, complexes and educational facilities of all kinds, such as schools, universities, colleges, health facilities, and the similarly).
5. The presence of public parking adjacent to any plot does not exempt this plot from the conditions of providing car parking therein in accordance with the provisions of this regulation, with the exception of the commercial center area (Al Nakhil) as stated in clause (30.2) of this article.
6. The locations of the entrances and exits of the cars must be adhered to the requirements of the Concerned Department and according to the planning requirements if there is what defines these places on the masterplan.
7. Vehicle entrances or exits shall not be placed on pedestrian sikka, on lots designated for parking or public utility unless entry from the road is not possible or for any approved technical reasons by the Concerned Department.
8. It is permitted to exceed the maximum level of the basement roof specified under the provisions of this regulation if the basement floors and the ground floor are designated as car parking, provided that the height of ground floor does not exceed the height specified in this regulation.
9. Road works drawings attached to the building permit application must include the following drawings as a minimum:
 - A site plan (setting out plan) shows the roads, sikka, sidewalks, and neighboring surrounding the plot, as well as the levels of the sikkas, existing roads, levels of the plot and the neighborhood, the reference levels, entrances and exits of the cars, direction of traffic in the roads surrounding the plot. In addition to any traffic signs, intersections, turns, or obstacles affecting the entrances and exits, as well as any light poles.
 - Car parking plans for all floors including parking calculations.
 - Standards, specifications, traffic instructions, signals and necessary control means.
 - Any other details requested by the Concerned Department.

- Traffic impact study (upon request).
10. Appropriate natural lighting and ventilation must be provided, and if this is not possible, then artificial lighting shall be provided with an effective mechanical ventilation system in accordance with the standard specifications approved by the Concerned Department.
 11. The necessary installations for rain water drainage must be provided at the end of the entry and exit ramps. The necessary ground drains and ramps must be made on the floor of the car parking.
 12. If it is found after the issuance of the Building Permit that there is a conflict between the exits and entrances of the neighborhood, the traffic or the surrounding streets; then the Competent Department shall have the right to request the modification of the entrances or exits in accordance with the existing situation.
 13. Car parking floors shall be covered with an appropriate layer of concrete finish that is easy to be cleaned.
 14. The Drawings indicating the method of excavation protection must be submitted to the Competent Department for approval if the excavation work on the boundaries of the plot from the neighborhood, and to the Concerned Department if the excavation work on the boundaries of the plot from the side of the roads or sikkas.
 15. A drawing plan must be submitted for the external sidewalks surrounding the plot, indicating the dimensions and reference levels for approval by the Concerned Department, taking into consideration that the sikkas surrounding the building are paved to the middle of it at a level exceeding (0.15) m above the approved design level, and the tiles used in the sidewalks are determined according to the requirements of the Competent Department.
 16. Charging stations for electric and hybrid vehicles must be provided in accordance with the requirements set out in clause (403.03) and table No. (15) of Ras Al Khaimah Green Building Regulations "Barjeel".

30.2 Technical Requirements

1. Different floors of parking must be provided with floor signs and traffic signs installed in clear places indicating the direction of entry and exit and traffic circulation inside the car parking . As well as placing reflective mirrors on places where there are not enough vision spaces.
2. Parking lots must be equipped with concrete wheel stopper to prevent overstepping the front limits of the parking lots.
3. All columns and walls adjacent to the circulation of vehicles must be equipped with appropriate rubber corners for protection during the movement of vehicles. It is not required to provide these corners if there are sidewalks that prevent them from being exposed to the movement of cars.

4. Parking areas and numbers must be specified according to the plans approved by the Concerned Department.
5. Minimum number of carparks that must be available in special buildings that are not mentioned in this regulation is as follows:

Table No. (50) shows minimum number of car parks that must be available in special buildings

#	Use	Detail	Min. Parking Lots
1	Theaters and Cinemas	For each (3) seats	1
2	Wedding and Banquet Halls	1 Parking Lot / 20 m ² of the Hall Area	
3	Entertainment Uses, Specialized/Public Buildings	According to the studies for each project	

6. All plots located in the commercial center area (Al Nakhil) according to the Map of Uses Classification shall be exempt from requirements for providing car parks and according to the planning requirements issued by the concerned authority for the plot.
7. If the plot is located in the commercial center area (Al Nakhil) on two roads, one of which is a secondary road and the other is a main road , the permitting of car entrances and exits is restricted to the secondary road only, or as determined by the Concerned Department.
8. Determining the locations of entrances and exits of the car parks shall take into consideration the following items:
 - Separate entrances and exits for cars (ramps) must be provided for each parking floor. The Concerned Department may approve the addition of electric elevators for cars if there are Technical Reasons that require this addition, the consultant must present a thorough study of the elevators as in item (38.3) of Article (38) of this regulation, the presence of at least one ramp for cars is required.
 - To be at a distance not less than (15.00) m from the corner of the land lot and the Competent Department can reduce this distance to (9.00) meters in case of technical reasons that require this.
 - To be far enough, in order to be approved by the technical committee, from any traffic intersections and not to be facing a (T) intersection in case of single streets.
 - No conflict with the entrances and exits of buildings in the neighborhood.
 - The locations of the entrances and exits of car parks shall be chosen to ensure the safety of traffic in the streets surrounding it by placing them as far as possible from the intersections and highways.
9. Minimum width of Parking Lots entrances and internal roads shall be as follows:
 - (3.00) m in one-way traffic only.
 - (6.00) m in two ways traffic.

- In Small Plots or those that have compelling technical conditions, the Competent Department may accept one lane of (3.00) m wide for entry and exit of cars after the light signals and the necessary electronic system to control circulation have been provided, all requirements of the Competent Department in coordination with the Concerned Department are applied.
- Minimum dimensions of bus stops shall be (12.00 x 4.00) m, and the minimum width of the traffic lanes in bus stops shall be (12) m if the street is one-way only, and (16) m if the street is two-way.

10. Curves must be of suitable dimensions for the circulation of the car's turns and turning safely inside the Parking Lots and upon entering and exiting it, as shown in Figure (14).

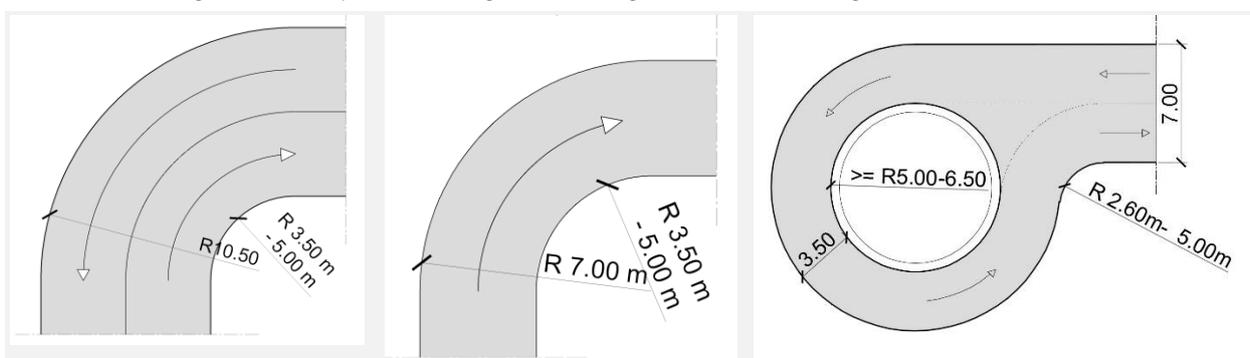


Figure (14) shows dimensions of curves for cars circulation in parking lots *

*Reference: Neufert Architects' Data, Ernst and Peter Neufert ,Third Edition,Wiley-Blackwell,

11. The minimum dimensions for light car parks and the width of traffic lanes in light car parks shall be as follows (as per Figures 15 & 16 & 17):

- **In case of Parkings parallel to the road**

Minimum dimensions of car parking space shall be (2.50 m × 6.00 m), and the minimum width for the street is (4.00) m.

- **In case of parking at an angle of (45°) degrees to street direction**

Minimum dimensions of car parking space shall be (2.50 m × 5.50 m), and the the minimum width for the street is (4.00) m.

- **In case of parking at an angle of (60°) degrees to street direction**

Minimum dimensions of car parking space shall be (2.50 m × 5.50 m), and the the minimum width for the street is (4.00) m.

- **In case of parking perpendicular to the street**

Minimum dimensions of car parks space shall be (5.50 m × 2.50 m), the minimum width for the street is (5.50) m if the street serves in one direction, and the width of the street is (6.00) m if the street has two directions.

If the driveway of parking lots ends at a dead end with a width of 6.00 m or less, a turning bay shall be made at the end so that the cars can turn around and go back out of the corridor (the lane) without obstructing the road (as shown in Figure 17).

- The Competent Department may reduce the length of the car parks space that are designed inside the plot by no more than (40) cm under compelling technical reasons that require this and approved by the Building Permit Committee.
- Minimum clear parking height shall be (2.50) m and maximum height is (4.00) m. Unless the parking is part of a floor in which another activity is practised, it can be allowed for the height of the floor to be unified according to the maximum authorized height for that floor.

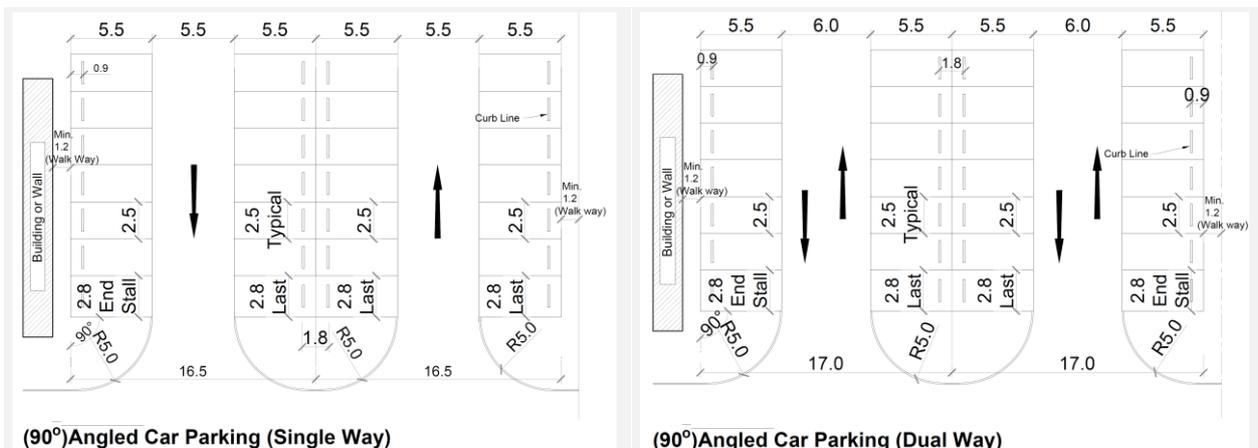


Figure No. (15) shows dimensions of vertical light car parks and traffic lanes.

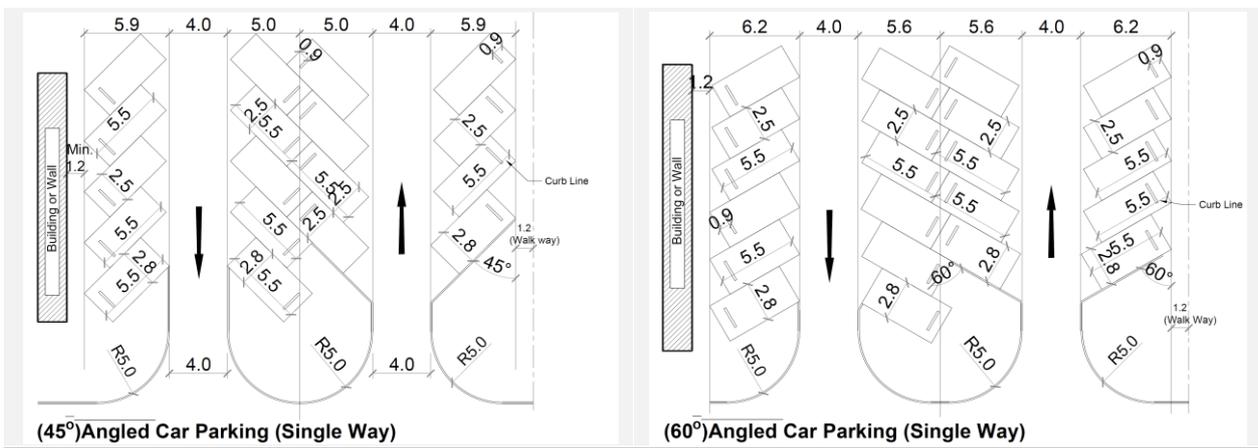
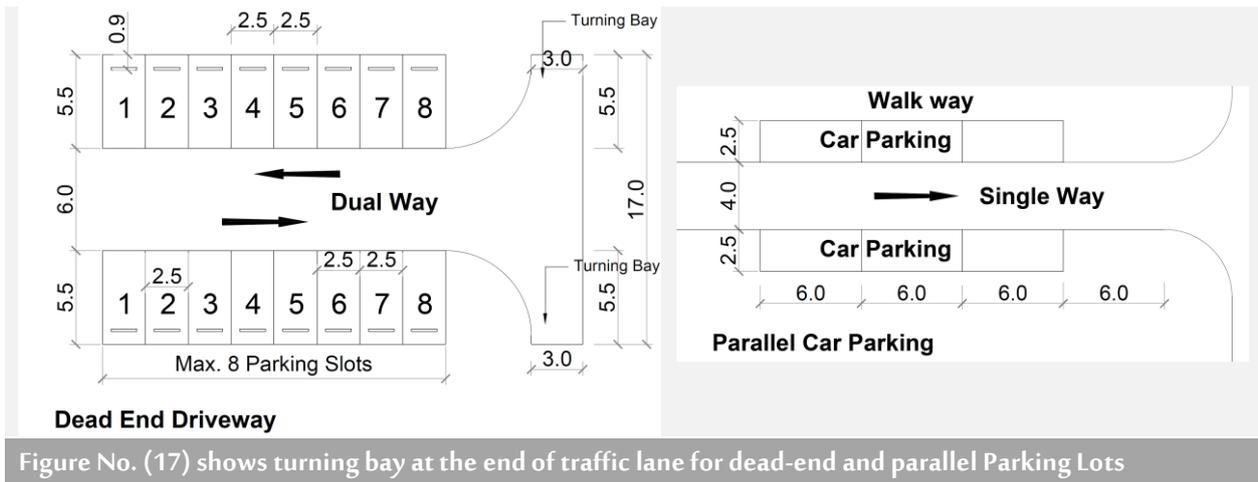


Figure No. (16) shows dimensions of light car parks inclined at angles (45 ° and 60 °) and traffic lanes.



Article (31) Paving of Parking Lots and Sidewalks for Buildings

1. The owner of the completed building is obligated to pave with interlocking tiles the entire area between the boundaries of the plot and up to the boundaries of the asphalt (existing / proposed), including pedestrian paths and parking lots (existing / proposed) from all sides overlooking the streets or pedestrian sikka (half of the common sikka with the neighborhood).
2. The owner of the completed building, for non-residential plots, shall comply with the scheme approved by the concerned department, subject to Clause (1) of this Article. Existing buildings can also apply for a permit for paving work to the Competent Department, provided that the conditions and specifications approved by the Concerned Department are adhered to.
3. It is not necessary to obtain a permit to complete the paving work within the boundaries of the plot if a boundry wall separating it from paving works outside it.
4. Pavement works include tiling the connection points with the entrances leading to the plot if there are approved parking lots within the plot, whether the parking is covered or shaded (multi-storey) according to the approved design, with the provision of signs and traffic signs for the entrances and exits of cars according to the design approved by the Concerned Department. The Concerned Department must also take into consideration all the plans approved by the Municipality's administrations when designing paving works.
5. Ends of the tiles with the adjacent plot (if not built) up to the road asphalt shall be curbstone laid horizontally. However, if the neighboring plot is built then the interlock tiles shall be merged and integrated.
6. The executed pedestrian walkways shall be considered an integral part of the right of way and shall not be occupied or encroached upon. The parking lots shall be similarly treated and prohibited to be blocked by posts or chains. It is not permitted to damage the pavement or any of its elements.

7. The completed building is granted a completion certificate and approval for services supply only after ensuring that the parking lots and pedestrian paths are implemented according to the designs approved by the Municipality’s Planning & Survey department.
8. The consultant / Contractor must clarify any obstacles at the site, and refer to the concerned authority for any coordinates / levels necessary to complete the implementation of the paving works. The continuity of the level of paving work must also be taken into consideration with the adjacent plots.

Article (32) People of Determination Requirements

Details and requirements of people of determination must be referred to the "U.A.E Universal Design Code", which was adopted based on Cabinet Resolution No. (1/1) of 2019.

32.1 Public Buildings Requirements

Such as markets, commercial centers/malls, mosques, theaters, cinemas, sports stadiums, public parks, and government buildings that are frequented by the public must achieve the following minimum requirements:

1- Ramps/Slopes:

- Ramps at sidewalks, external stairs, and areas of changing levels inside and outside buildings, with a slope not more than (1:12) or (8%) .
- Ramps width should not be less than (1.20) m.
- Ramps flip length should not exceed (10) m, and in the case of increasing it more than (10) m , it is necessary to add a break with minimum dimensions are not less than the width of the ramp.
- Ramps shall be designed with a straight track or a ramp at an angle of (90°) or at an angle of (180°), as the following figure.

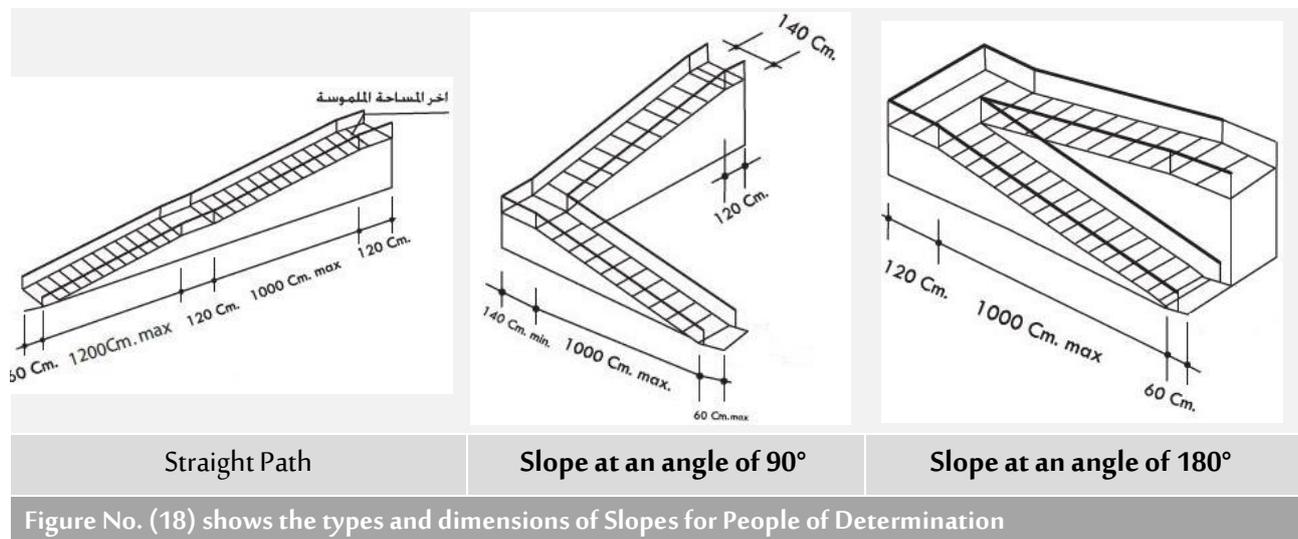


Figure No. (18) shows the types and dimensions of Slopes for People of Determination

2- People of Determination car parking

- In car parking that do not exceed (200) cars, at least one parking lot must be provided for the use of people of determination for each (33) parking lots; moreover, for the car parking that can accommodate more than (200) cars and up to (1000) cars, the number of parking lots designated for people of determination is 1:100, and in case of car parkings that can accommodate more than (1000) cars, a minimum of (1) one parking lot must be allocated for people of determination for every (200) parking lots.

Table No. (51) shows minimum number of Parking Lots for People of Determination required for Public Buildings

Required No. of Parking Lots		
Public Buildings	Total No. of Parking Lots	Minimum required Parkings
	≤ 200 Parking Lots	1 People of Determination Parking/ 33 Lots
	201:1000 Parking Lots	1 People of Determination Parking/ 100 Lots
	> 1000 Parking Lots	1 People of Determination Parking/ 200 Lots

The following is taken into consideration:

- Parking lots should be as close as possible to the elevators or main entrances to buildings with direct paths to them from the Parking Lots without obstacles (providing pavement slopes) and at a distance of no more than (50) m, and car park space dimensions are (2.60m × 5.50m) for angular parking, (2.60m × 6.00m) for parking perpendicular to the sidewalk, the access corridors beside the parking shall not be less than (1.20) m and connected to a pedestrian path.
- Providing suitable loading and unloading spaces in accordance with the design standards for People of Determination at the main entrances.

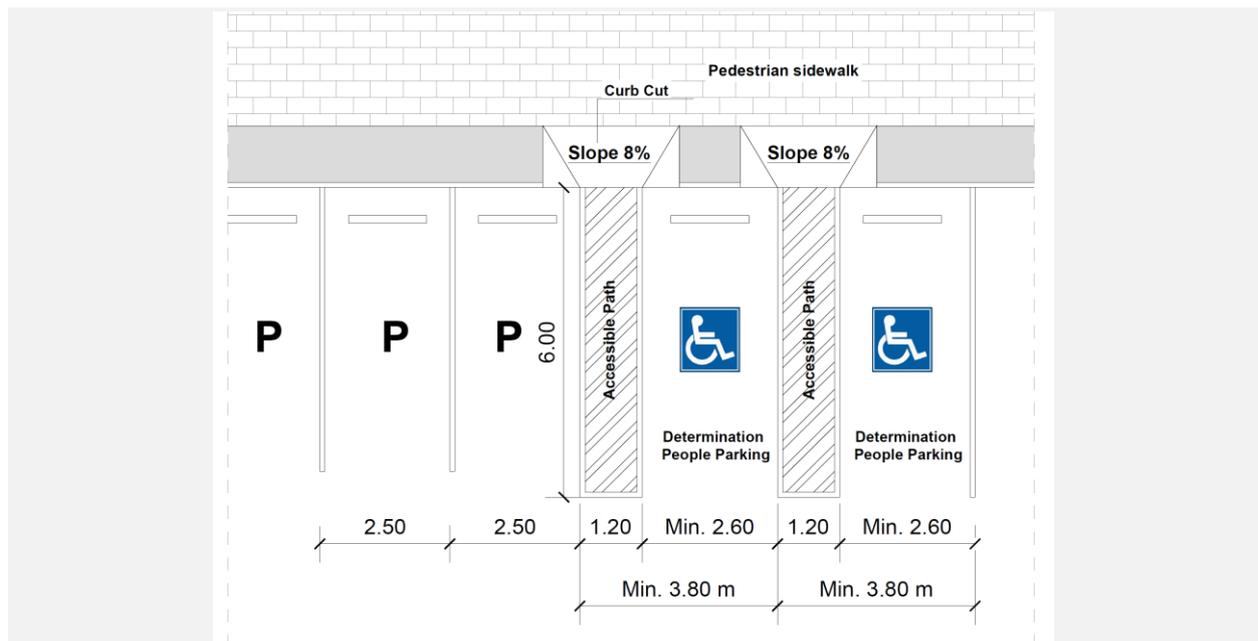


Figure No. (19) shows minimum dimensions and requirements for People of Determination Parkings.

Reference: "U.A.E Universal Design Code"

3- Toilets

The private toilet for People of Determination must be provided and equipped according to the design standards approved by the Concerned Department, with instructions indicating this whenever necessary. Provided that an internal space is available for free wheelchair mobility with a diameter of not less than (1.50) meters, and it shall be equipped with support and assistance handles in their locations as shown in Figure No. (20)

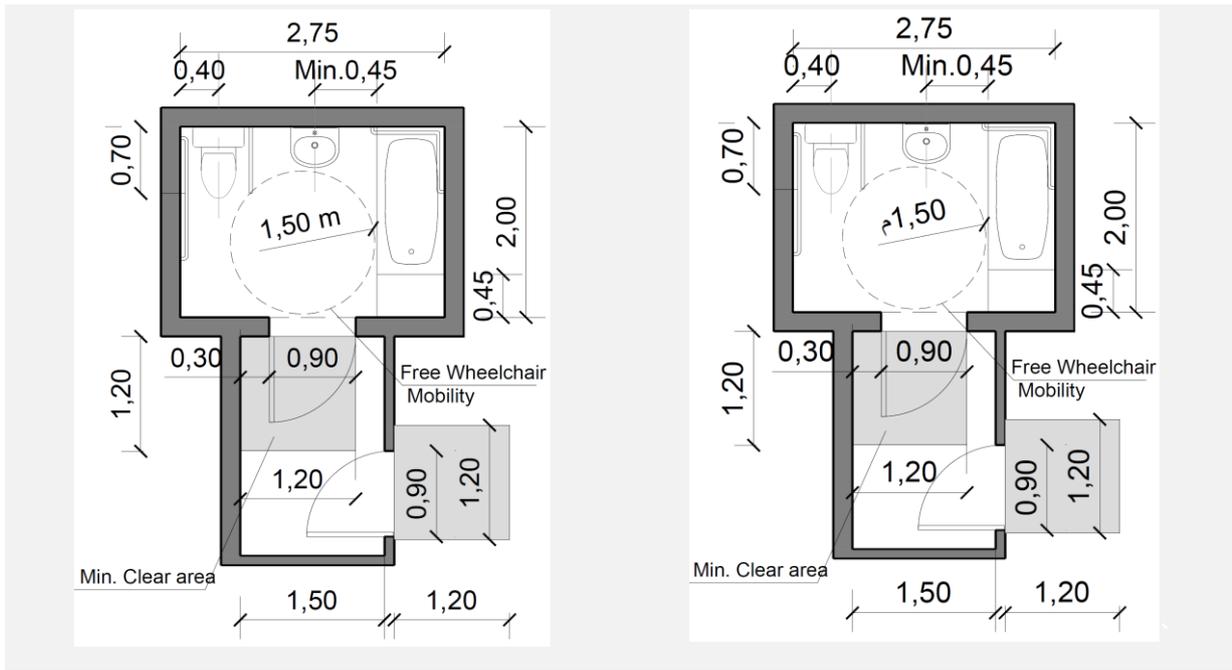


Figure No. (20) shows dimensions of People of Determination Toilet.
Reference: "U.A.E Universal Design Code"

Figure No. (21) shows dimensions of People of Determination Toilet.
Reference: "U.A.E Universal Design Code"

4- Elevators

- One of the elevators must have a capacity, specifications, dimensions and equipment that comply with the international standards approved for People of Determination, provided that the elevator cabin, which accommodates one wheelchair, is not less than (1.00 x 1.30) m, and the internal height of the handrail is (0.85) m fixed on the inner perimeter of the cabin.
- At least one elevator must be provided in conformity with the approved standards for People of Determination in public buildings and commercial centers with more than one floor and the escalators are not considered a substitute for this elevator unless they are equipped with the necessary equipment for People of Determination.

5- Corridors

Corridors must be of sufficient dimensions for People of Determination in accordance with the approved standard criteria , and have accessibility to enter and exit all doors and access to all internal and external elements without obstacles that limit traffic.

Considering the provision of Security and Safety requirements for different categories of People of Determination.

32.2 Investment Buildings Requirements (Investment Buildings, Residential Commercial)

Buildings whose total area exceeds (4650) m², the following must be provided:

1- Ramps

Slope of ramps shall not exceed (1:10) on the sidewalks, external stairs, and areas of changing levels wherever they are found inside and outside the building, as in Figure (18).

2- Elevators and Corridors

One of elevators and corridors on the floors, the external and internal circulation paths, and the parking lots must have sufficient specifications and dimensions to accommodate the movement of people of determination in accordance with the approved standard criteria .

3- People of Determination car parking

- Number of parking lots designated for People of Determination shall be determined according to what is stated in item No. (32.1) of this regulation.
- Guidelines for People of Determination car parking shall be developed wherever necessary, in accordance with the approved standard criteria.

4- Circulation Tracks

People of Determination tracks must be direct, with dimensions in compliance with the approved standard criteria , and free of any obstacles.

5- Toilets

People of Determination toilets must be provided in accordance with the provisions of item No. (32.1).

32.3 Hotel Buildings classified from (1-5) Stars Requirements

The following services must be provided as a minimum for people of determination:

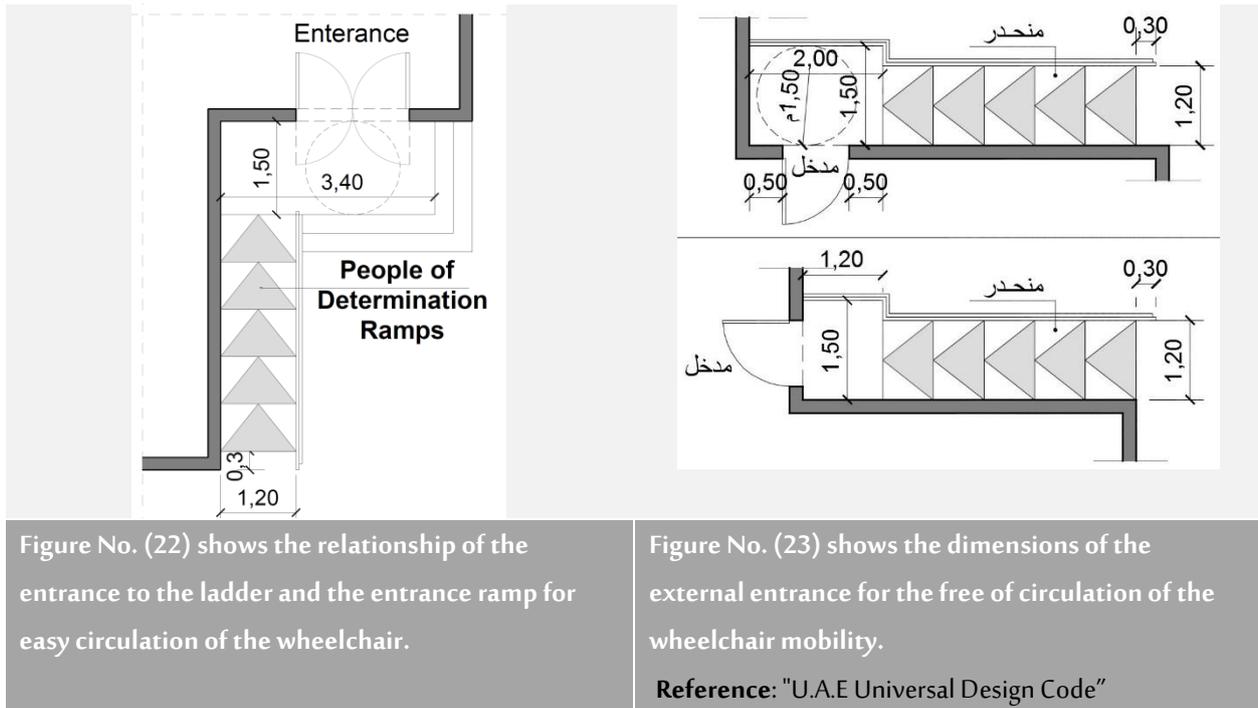
1. Minimum number of rooms designated for People of Determination (1%) of the total rooms, with a minimum of one hotel room.
2. A hotel room must be provided on the first floor level with access to it without stairs.

3. The room must be fully equipped in accordance with approved international standards approved for the People of Determination in terms of the dimensions of the room, the door and the areas surrounding the bed, the central turning area of a diameter of not less than (1.50) m and an area in front of the wardrobe with dimensions (1.50 m × 1.50 m), the opening of the window automatically, and the design Office table, cupboard, electrical switches, alarm bell and sitting chair.
4. The room must be provided with a bathroom in accordance with the approved international standards for the People of Determination, including adherence to the standard criteria with a bathroom seat "with a height of (43-49 cm)", a bathtub, and a sink with a height of no more than (68) cm and no less than (75) cm. the spaces surrounding them, cabinets, mirror, floor type, door sizes, movement, the locations of complementary elements in the bathroom, the locations of the anchor and auxiliary handles, and providing a space of (1.50) m in diameter for free wheelchair mobility inside the bathroom, as in figure (20&21).
5. The room shall have an emergency exit that leads directly outside the building or to the balcony. Security and safety measures shall be provided for the different categories of people of determination in the hotel.
6. One of the elevators shall be fitted with specifications that match the international standards approved for people of determination in terms of dimensions, standards, height of the control panel, the time of elevator door opening and the internal parapet.
7. Number of parking lots designated for People of Determination shall be determined according to what is stated in table no. (16) of this regulation, and that they be as close as possible to the elevators or the main entrance to the hotel, while providing them with the necessary indicative signs, and that their sizes are in accordance with the approved UAE Standard Criteria for People of Determination.
8. Providing loading/ unloading spaces at the main entrance of the hotel in accordance with the approved standard criteria for people of determination.
9. Providing ramps/slopes with a slope of not more than (1:10) at the sidewalks, external stairs, and areas of changing levels inside and outside buildings, along with the necessary warning instructions.
10. Provide direct and unimpeded paths from the parking lots to the elevators or the main entrance to the hotel, that the corridors have sufficient width for the circulation of people of determination in accordance with the approved standard criteria, and that accessibility be available to enter and exit all doors and access all internal and external elements without any obstacles that limit its mobility.

32.4 General Requirements

Ramps and pathways for people of determination must meet the following conditions:

1. The width of the ramp should not be less than (1.20) m, and the slope ratio should not exceed (1:12). The Competent Department may amend the ratio to (1:10) whenever there are convincing technical reasons.
2. The slopes of the sidewalks should be within the pavement itself.
3. In the case of two consecutive slopes, a stopping area must be provided between the two slopes of sizes according to the approved standard criteria approved by the Concerned Department.
4. All ramps, paths and stairs must be equipped with the necessary warning signs (roughness, colors) at the starting and ending points and upon accessing roads.
5. It is forbidden to locate any car parks facing the ramps, the minimum width of the car park is (3.80) m, and it is preferable to provide a passage of not less than (1.20) m between car parks for the passage of people of determination as shown in Figure (19).
6. The ramps/slopes should be in the direction of pedestrian traffic direction on the sidewalk.
7. The upper surface of the ramp must be flat and free of cavities that obstruct movement.
8. Provide the ramps with solid side handrails and protect them in case their height exceeds (0.50) meters.
9. Manholes and sewage openings are not allowed on ramps/slopes and corridors for People of Determination.
10. Paths and ramps should be provided with signs and pedestrian signs that specify directions.
11. Corridors and ramps shall be equipped with solid barriers to prevent falling at turning points.
12. the handrails of ramps and stairs for People of Determination extend a distance of (30) cm at the end and beginning points of the ramp and stairs, as well as around the corners.
13. The necessity of having a suitable primer in front of the entrance to facilitate the rotation of the wheelchair with the lowest width (1.20) m, as shown in figures No. (22) and (23).



Article (33): Environmental Requirements and Energy Control

33.1 Environmental Requirements for Building Design

1. The consultant must adhere to the following requirements during the building design stage. Different environmental influences (such as climatic conditions, sunlight, nature of the land, neighborhood, noise level, and other environmental conditions) must be taken into consideration, and the use of thermal and sound insulation in roofs and walls. In addition, all requirements and specifications mentioned in the approved green building regulations 'barjeel' must be followed when preparing various building designs.
2. The approval of environment protection and development authority in the emirate must be obtained for projects that include uses that directly or indirectly cause environmental pollution of any kind. all requirements related to environmental protection, approved by the concerned department, must also be applied.
3. It is necessary to study the directions of the sun's rays and employ the architectural elements to reduce their negative effects and study the prevailing wind directions and work to use it for the benefit of the building.
4. Chosen materials shall not have any harm to the environment and public health or affect the general appearance of the city, such as temporary installations, whether during usage or after completion, and according to what is determined by the Competent Department.

5. It is not permitted to license any buildings whose roofs contain asbestos according to cabinet resolution no. (39) of 2006, as well as any material that proves harmful to public health. any undertakings to remove these roofs from existing buildings for licensing purposes are not accepted, with the owner obligatory to remove them and replace them with safer materials.
6. Public health conditions inside and outside the building must be taken into consideration in terms of studying the circulation and amount of ventilation, lighting, sunlight and shades, and the choice of materials, dyes, etc.
7. Privacy must be taken into consideration when preparing different building designs, and boundary walls with a height and appropriate designs must be made to be approved by the Competent Department to separate the different plots of land.

33.2 Environmental Requirements for Construction Work

Consultant and the Contractor must adhere to the following requirement during constructions:

1. Work shall be carried out to use the insecticides approved for anti-termite control including termites on the ground floor and wherever necessary.
2. The provisions of Environment Protection and Development Authority Legislation in the Emirate must be adhered to in everything related to the Reuse and disposal of wastewater, air control, occupational health, swimming pools, safety of children's playing facilities available in buildings, noise control, and natural reserve systems.
3. It is not permitted to remove or cut the trees existed within the boundaries of the plot without written consent of Environment Protection and Development Authority.
4. The upper limit of the noise level resulting from any equipment or construction work should not exceed (55) dB during the period from 7 AM to 8 PM, and not more than (45) dB during the period from 8 PM to 7 AM.
5. It is not permitted to demolish, remove, or modify historical heritage buildings and architectural elements without the approval of the Concerned Department, and the approval of the Competent Department must also be obtained.
6. Work must be stopped and the Municipality shall be informed immediately when any antiquities or archaeological Sites are found, or damage to service lines, buildings, streets, or the surrounding environment is caused.
7. It must be ensured that the necessary requirements are provided to limit the harmful environmental impacts during the different construction stages of the site in terms of:
 - a. Adherence to work schedules according to what is determined by Competent Departement.

- b. It is not permitted to work in construction sites after 8:00pm, and it is not permitted to commence work before 6:00am in populated areas, and the Concerned Department may grant permits to exceed this period if there are reasons that require so.
- c. Take the necessary and required measures to reduce the noise level resulting from construction equipment and machinery operating in the sites and adhere to the allowed sound limits.
- d. Taking the necessary and required measures to reduce the emission of dust and dirt through the following means:
 - i. Spray dirt and sites with water when exposed to traces of dust.
 - ii. Cover the entrances and places of cars circulation areas with suitable materials or spray them continuously with water to prevent the emission of dust.
 - iii. Prevent dumping of debris directly from the upper floors without using protective barriers.
 - iv. Take the necessary precautions while transporting and unloading building materials.
8. Take the necessary and required measures to reduce the emission of gases and smoke resulting from construction equipment and machinery and to ensure that it is maintained at the allowable level.
9. Take the necessary precautions at construction sites to maintain the cleanliness of the site and the safety of the surrounding environment, including neighboring buildings, streets, service lines, sidewalks, agriculture... etc.
10. The supply and storage of building materials in the construction site should be in proportion to its area not affecting the general appearance, with the necessity that fuel and chemical materials be stored in confined places far from direct daily activities and be under regular control and in small quantities.
11. Appropriate procedures must be taken and the necessary programs to collect, sort and store waste and debris at work sites, and then transport them to places designated for throwing rubble in a way that prevents their accumulation on the site or pollution of the surrounding environment.
12. Construction must be guided and acted upon green building regulations 'Barjeel' approved by the Concerned Department in all matters related to the details of thermal insulation works.

33.3 Operating Requirements

Consultant and the Contractor shall, upon operation, adhere to the following requirements:

1. Buildings that are higher than the ground and one(G+1) floor in height and contain large areas of glass in the facades must be provided with the necessary equipment and devices for cleaning the glass from the outside in accordance with what is decided by the building licensing committee. when

the height of the buildings exceeds the ground and six (G+6) floors, the consultant must present a study or a plan that shows how these equipment and devices are needed to clean the glass, its movement on the surface and its storage method.

2. Building materials used on the facades of the buildings must not be subject to fall to pedestrians and follow in their installation the technical requirements and specifications approved by the Competent Department.

Article (34): Fire Prevention and Safety

1. The approved standards and requirements approved for all buildings by civil defense department are the main reference for All related to security, safety, prevention and fire fighting.
2. All stairs and corridors must be equipped with natural and mechanical ventilation, according to the requirements of civil defense.
3. The areas of the staircase and the pump room must be approved within the architectural plans submitted to the civil defense, due to the difference in their areas according to the requirements.
4. The exterior cladding of the buildings must be approved according to the requirements of civil defense.
5. The owner is responsible for maintaining fire alarm and firefighting equipment and systems inside the buildings, and the tenant is responsible for removing obstacles from the escape corridors and maintaining the alarm and firefighting equipment and systems in leasable part, with ensuring the device validity and power supply continuity all the time.
6. It is not permissible to install any barriers or obstacles directly on the windows of the external facades located on the floors above the ground floor of the building unless they are easy to open.
7. All public building safety requirements, systems and regulations stipulated in environmental, health, public and occupational health and safety legislation and fire protection systems in force in the emirate must be adhered to.
8. Minimum number and width of building exits and entrances are determined according to the number and area of floors, the function of the building, and the standards approved by the Concerned Department.
9. The doors of the stairs, apartments, offices, and all the accessories and hardware thereof must be fire-resistant according to the rates approved by the Competent Department, smoke-free and self-closing.
10. All drawers must be equipped with regular and emergency ventilation and lighting in accordance with the standards approved by the Concerned Department.

11. All buildings must be provided with self-illuminating signs and directional sign boards in all corridors, stairs and interior squares of the building to clearly indicate the way to stairs, elevators and places of exit and escape in the building.
12. All buildings whose height exceeds (20) floors shall be provided with a helipad in accordance with the Standard Specifications approved by the Concerned Department.
13. All corridors leading to the exit must be free of everything that hinders freedom of circulation and exit from the building at all times.

Article (35): Insulation Materials

The following requirements must be applied for moisture and heat insulating materials:

1. Moisture protection layers must be applied to the floors of bathrooms, kitchens and toilets.
2. Moisture and heat insulation layers shall be applied on the building roof to protect it from leakage of rainwater and heat, the roofs shall be insulated (a layer of insulation against moisture, a layer of insulation against heat) according to the design proposed by the consultant and approved by the competent authority according to the standard technical specifications.
3. Insulation Layers shall be applied around the foundations of the building up to a height of (30) cm above the ground level.
4. All types of rustable metals must be painted and protected with insulating materials and maintained at regular intervals, specially drainage and feed pipes.
5. Materials used in the external walls and surfaces must be of homogeneous composition, not able to absorb water, moisture and water vapour, have high long-term efficiency, be resistant to corrosion and the prevailing environmental conditions, have fixed dimensions, are less ability for expandable or contractile, have thermal shock resistance and are able to withstand rapid changes in temperature without being exposed to physical damage and being fire retardant in the walls and fire-resistant if installed in a way that exposes it directly to fire, and it should be anti-fungi type, not subject to the reproduction of microbial organisms, rodents or insects, and resistant to chemical reaction or change.
6. The approved green building regulations 'Barjeel' must be considered regarding to with regard to the performance of the building's exterior envelope and the calculation of the cooling loads and lighting equipment.

Seventh: Horizontal and Vertical Communication and Circulation Elements Requirements

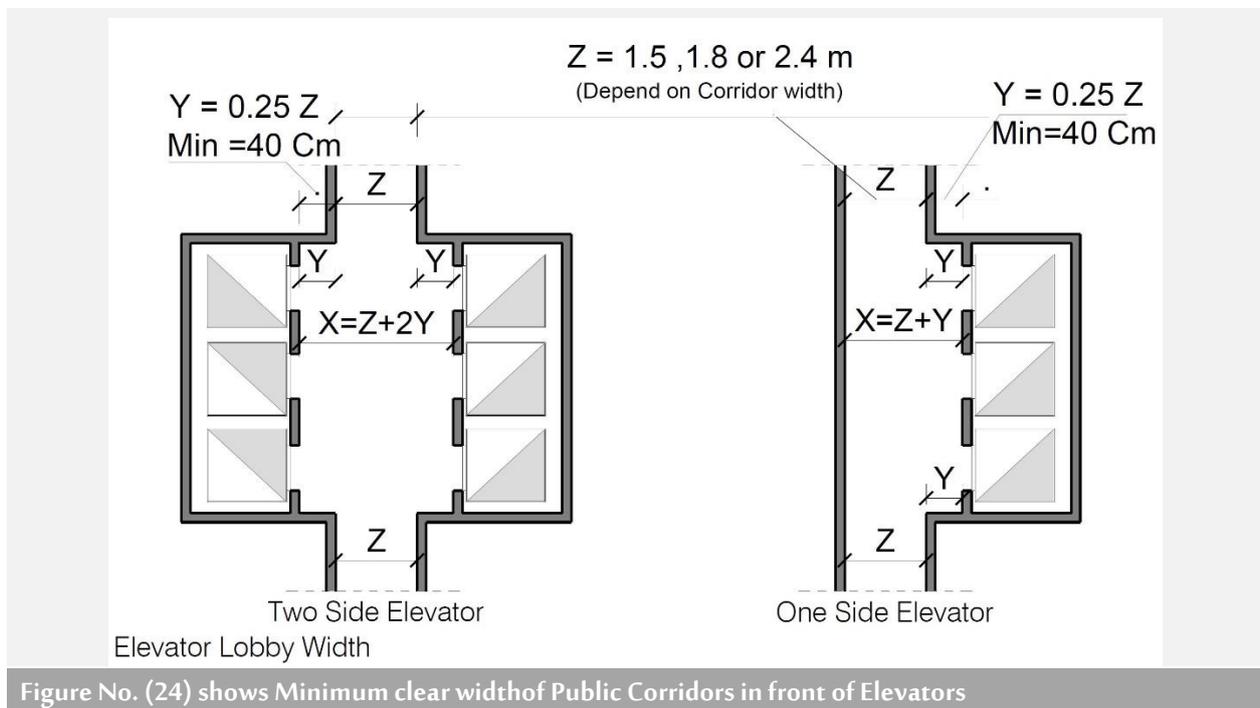
Article (36): Corridors

36.1 Public Corridors

1. Minimum clear width of public corridors in specialized buildings shall be according to the nature of use, with a minimum of (2.40) m.
2. Minimum clear width of corridors in front of the elevators depends on the width of the main corridor leading to it and the elevator locations on one or two sides, and the dimensions of the corridors in front of the elevators must not be less, as shown in Figure (24).
3. It is allowable to authorize the competent authority to reduce the width of the corridors , where the shape of the land or its dimensions is not permitted to provide public corridors with the required width according to the above items.

36.2 Internal Corridors

Clear width of internal corridors between different units shall not be less than (1.20) m



Article (37): Arcades (Liwan)

In buildings overlooking the roads and in which arcades are to be constructed, they must be provided with lounges in front of the facades of those buildings, subject to the following requirements:

1. The design and construction of the arcades shall be according to the nature, shape and height determined by the Competent Department.
2. It is allowed to construct an unutilized aesthetic projection Within the corridors according to requirements as follows:
 - a. Ornaments and decorative elements shall be at a height of (0.30) m and at a height not less than (3.00) m from the arcade floor.
 - b. The endings, window sills and the columns crown of the ground arcades shall not exceed (0.15) m.
 - c. The installation of sign boards determined in the region shall be subject to the legislations governing it and in force in the Emirate.
3. The openings of the arcades are regular and consistent.
4. The liwan must be prepared for public traffic, and it is not allowable to place any obstacles or occupations in it that prevent or impede its use in the manner prescribed for it, and the continuity of the corridors of the connected buildings must be taken into consideration and their levels to be studied to serve the public traffic.

Article (38): Stairs

Each building consisting of more than one floor and the area of one floor in it is not exceeding (460) m² or (1400) m² for the building as a whole must be equipped with one main staircase as a minimum, and if the area increased from (461) to (930) m² for one floor. or from (1401) to (2800) m² for the building as a whole, an additional staircase must be created for each similar increase, and the distance between the staircase exit to any apartment must not be increased in accordance with the requirements of Civil Defense Department in the emirate.

38.1 Stairs Location

When choosing a location for the stairs, it should be taken into consideration that the following specifications are met:

1. Easy access from any point in the building, and its location shall be as close as possible to the roads or Sikka.
2. The distance between the door of the staircase and the farthest point on the floor shall not exceed (27) m in the ordinary buildings and the distance shall be measured according to the actual length of the pathway, in a manner that does not violate the requirements of Civil Defense.
3. If the staircase is located directly after a door, they must be separated by a distance of not less than (1.10) m and it is not allowed to make a angled steps to prevent stumbling or falling.

38.2 Dimensions, Measurements and Number of Stairs

1. Clear width of the stairs is estimated based on the calculation of the breadth of the exits, and in all cases its width must not be less than (1.10) m in residential and office buildings and (1.50) m in the buildings used for public benefit, and the width of the stairs must not be less than the width of the stairs itself.
2. Maximum number of continuous stairs in one direction should not exceed (14 steps), with the exception of circular stairs with special designs, and the maximum height of one step should not exceed (18 cm) and its width is not less than (28 cm) and not more than about (32) cm, and the dimensions of the ladder are determined according to the following equation:
[Double the height of one stair + the width of one stair = (60) cm to (65) cm.]
3. Steps shall be of the same height and width on one floor.
4. Minimum clear height above any stair shall be (2.40) m.
5. Number of continuous stairs in the same direction may not exceed (14) steps.

38.3 Emergency Stairs and Escape Exits Requirements

In case of emergency stairs, the following additional conditions shall apply:

1. The stairs must be separated by a fire-proof wall and a smoke-proof door with a resistance fire rating of not less than one hour, provided that it is automatically closed, allows viewing from both sides, and opens to the outside in accordance with safety and fire prevention requirements.
2. There must be adequate natural and artificial lighting in the emergency staircase and it must be provided with natural ventilation openings of no less than (1.00) m² per floor.
3. It is not allowed to have an emergency staircase (escape) that runs continuously from the upper floors to the basement. A separate staircase must be used for the basement. If this is not possible the continuity of the staircase space on the ground floor should be interrupted by a fire barrier that extends to the roof which allows access to the basement directly from the outside.
4. The width of the emergency stairs must not be less than (1.20) meters (unless otherwise stated in other articles of this regulation), and if the width of the stairs exceeds (2.40) meters, handrails shall be placed in the middle or every (1.20) meters.
5. Number of steps of escape stairs shall not exceed (14) and not less than (3) steps and the height of a step shall not exceed (17) cm. Angled steps are not allowed in the landing of escape staircase. Spiral stairs shall not be used as escape stairs.

6. Fire escape exits in all buildings must be provided with clear signs indicating their locations and that they also fulfill the following requirements (taking into consideration the requirements and approval of the Civil Defense Department).

38.4 General Requirements

1. Main stairs in residential, commercial and public buildings shall be made of fire-proof and non-slip materials (excluding Villas). Ventilation and natural lighting shall also be provided in the stairs sufficiently by windows opening directly to the outside or courtyard. Stairs in towers exceeding (10) floors shall be exempted from natural lighting and ventilation conditions after providing appropriate mechanical ventilation and artificial lighting in accordance with the requirements of Civil Defense in the Emirate.
2. The staircase must be closed by a door at all floors.
3. There must be a protective barrier from falling on the free side of the stairs (handrails) with a height of not less than (1.10) m, and the width of the openings in it not exceeding (13) cm, and if the width of the stairs exceeds (2.20) m, an additional separator is placed in the middle (1 or more as needed).
4. Staircase exits in all buildings and all floors shall be provided with clear signs indicating their location.
5. All safety and fire prevention regulations and specifications approved by the Civil Defense and Competent Department must be taken into consideration when designing all types of stairs.

Article (39): Elevators

39.1 Elevators Locations

Elevators must be located in such a way that they can be easily accessed from any point in the building, that they are in visible places close to one of the stairs, they are placed in the closest places to the main entrance of the building, and that the distance between them and the last unit they are serving is not more than (45) m. It is preferable to divide the elevators into more than one group, each of which serves a group of floors, if the number of floors in the building exceeds (20) floors.

39.2 Regulations for providing Elevators to Multi-storey Buildings

Multi-storey Buildings must be provided with elevators according to the following regulations:

1. In buildings whose height exceeds the ground and three floors, it is required to provide electric elevators of sufficient capacity in accordance with the standard technical specifications and the approved safety and protection requirements against Fire Hazards.
2. In public buildings, it is required to provide electrical elevators or escalators of sufficient capacity in accordance with standard technical specifications and the approved safety and protection regulations against fire hazards (Approval of Civil Defense).
3. In commercial centers/malls that consist of more than one floor, it is required to provide electric elevators with a glass façade and a capacity (of not less than (10) persons per elevator or escalator).

39.3 Determining Number of Elevators

1. The number and capacity of elevators in the building must be proportional to the number and area of the floors, and the calculation of the total number of elevators required for the building is equal to the sum of the number of elevators required according to the total area of the building shown in table No. (52) and the number of elevators required according to the number of floors of the building as shown in Table No. (53).

Table No. (52) shows the minimum Number of Elevators according to the total area of the building.

	Total Building Area in m ²	Minimum Number of Elevators
1	1:4500	1
2	4501:14000	2
3	14001:23500	3
4	23501:100000	4 Elevators for the Area from 23501 : 37500 m ²
		An Additional Elevator for each increase of 14,000 m ² in the Area from 37,500 m ² , until the area reaches 100,000 m ²
5	100001:250000	9 Elevators for the area of 10,0001:120,000 m ²
		An Additional Elevator for each increase of 20,000 m ² in the Area over 120,000 m ² , until the area reaches 250,000 m ²

Total Building Area in m ²		Minimum Number of Elevators
6	+250000 m ²	Submit a special study to the Technical Committee of the Competent Department.

Table No. (53) shows Minimum Number of Elevators according to Floors Number of the Building.

Floors Number		Minimum Number of Elevators
1	From 11 to 30 Floors	1
2	From 31 to 60 Floors	2
3	From 61 to 90 Floors	3
4	From 91 to 120 Floors	4
5	+120 Floors	Submit a special study to the Technical Committee of the Competent Department

- The number of elevators required in clause (1) of this article is the minimum number of elevators, and it is not allowed to reduce their number even if elevators are chosen with greater speed and capacity.

39.4 General Requirements

- The consultant must submit a vertical transportation study of elevator design (for multi-storey buildings and public buildings) in terms of number, capacity, load, dimensions, speed, waiting time, stopping stations, elevator distribution according to the scientific analysis of elevator user circulation (Traffic Analysis), type of use, size and peak hours, design of machine room dimensions, elevator shaft, the elevator pit. The consultant is exclusively responsible for the design.
- It is preferable that the number of adjacent elevators on one side does not exceed (4) elevators if they work jointly for all floors, and if the number exceeds that, it is preferable to divide the elevators into groups serving specific floors.
- All elevators are subject to periodic inspection to ensure their validity, and the owner must obtain an annual validity certificate issued by an approved company by the Concerned Department.
- A lobby must be added in front of the elevator and closed with a door to protect from rain and various climatic conditions if the elevator goes up to the roof floor.

39.5 Technical Requirements

- The capacity of any of the elevators should not be less than (4) people and according to the technical and standard specifications of the approved elevators. Loads of the elevators are determined so as to achieve a transmission capacity between (10)% to (25)% of the number of people in the building within a period of five minutes, according to the type and use of the building.
- It is preferable to limit the speed of the elevators to no less than the following speeds:
 - Up to 4 Floors, the speed starts from 0.5 m/s to 0.75 m/s.

- 5 to 10 Floors, the speed starts from 1 m/s to 2 m/s.
 - 11 to 20 Floors, the speed starts from 2 m/s to 3 m/s.
 - 21 to 50 Floors, the speed starts from 3 m/s to 5 m/s.
 - More than 50 floors, the speed shall be more than 5 m/s.
3. The elevators, elevator shaft, machine room, and control circuits must be in accordance with the approved elevators standard specifications by the Civil Defense.
 4. The following regulations must be met in the Elevator shaft:
 - The dimensions of the elevator shaft shall be in compliance with the technical specifications of the elevator's manufacturer.
 - The water-exposed parts of the elevator shaft shall be treated with water-proofing Liquid materials.
 5. It must be ensured that the elevators are equipped with an electrical shutdown system as well as an alarm system (sound or optical) when the maximum load is exceeded, and to stop working if the load exceeds the permissible limit according to the manufacturer and return to work immediately when the load becomes within the permissible limit, and provide an emergency landing system. sufficient mechanical ventilation must be provided for the passenger carrying room (ascending) even in the event of long stops or power outages, and the elevator shall be provided with a mechanism that prevents the door from being closed in the event of a passage or collision with an object without any damage to the body. in addition to appropriate internal electrical lighting with an intensity of no less than (50) lux at floor level, all elevator systems requirements must be adhered to in the environmental and occupational safety legislation in effect in the emirate and civil defense.
 6. All electrical safety devices must be provided to prevent the machine from moving or stopping, and to provide the car with control and safety means so that it can land and the doors open automatically and manually to the nearest exit when the sudden stop of the elevator or the breakdown or emergency. In case the elevator engine temperature exceeds the maximum limit set by the manufacturer, the elevator will complete the current orders and reject any new orders.
 7. Notice and warning signage should be placed inside the elevators to prohibit smoking, determine the number of persons and the total permissible weights, as well as place boards beside each door to warn against using the elevator in case of fire.

8. The elevator shaft shall be enclosed by solid structural walls so that they can tolerate loads, reactions and vibrations arising from the machine and guide rails when safety brakes and any other stresses results due to the non-distribution of loads in the car or the end-of-motion dampers.
9. The elevator shaft shall be provided with inspection and emergency openings and with permanent lighting for use during the inspection and maintenance process in accordance with the approved safety standards and safety codes, with complete prevention of expansion joints or structural joints in the shaft or elevator room. It is not allowed to pass any wiring services not related to the elevators in the elevator shaft.

39.6 Elevator Machine Rooms Requirements

The following are required in elevator machine rooms that are constructed on building's roofs:

1. The dimensions of the room must be in accordance with the standard specifications of the elevators' manufacturer.
2. Provide the room with a good air conditioning system to ensure a temperature between (10-32) ° C.
3. The room shall be provided with a door to be closed, taking into consideration that all other openings of the room are sealed to protect it against dust or rainwater leakage..
4. All wires and cables of operation must be concealed of good, non-rusting material.
5. The room shall be provided with suitable covers for all rollers and moving parts.

39.7 Elevators in Hotel Facilities Requirements

1. Minimum (2) elevators shall be provided for buildings with less than (45) units, additional elevators for every (30) additional typical unit. All guest room is served from (2nd) floor and above.
2. Elevators must achieve all the requirements of Government Entities and Departments and the requirements issued by Ras Al Khaimah Tourism Development Authority.

Article (40): Ramps

1. Ramps may be considered when calculating the number of escape exists required for the building.
2. Ramps slope for vehicles shall not exceed (1:10), and the Competent Department may adjust the ratio to (1:8) when there are convincing technical reasons.
3. Ramps slope for the People of Determination shall not exceed (1:12) in public buildings, buildings, towers and office towers. The Competent Department may adjust the ratio to (1:10) when there are convincing technical reasons. The dimensions and inclinations of the ramps for people of determination needs shall be as specified in Article (32) of this regulation.

4. Ramps 'surafce shall be rough or equipped with anti-skidding material. The corners of the columns and adjacent walls shall be covered with rubber angles. These ramps shall be protected from any projections or installations that may obstruct movement or affect its usage properly and safely.
5. The dimensions of the ramps for the vehicles shall be in accordance with the dimensions specified in article (30) of this regulation for the internal roads and the width of the entrances and exits.
6. Ramps must be provided with mirrors with appropriate size to clear the visibility at turns, turning directions, and in areas where there is insufficient visibility.
7. The clear height above any point on the ramps shall not be less than (2.40) m. measured in a vertical direction on the ramp.
8. Lighting and ventilation (natural or artificial) shall be provided in accordance with the standard specifications approved for all parts of the ramps. Ramps shall be provided with all necessary connections for the drainage of rain water.

Eighth: Public Services Requirements

Article (41): Services (Electricity - Communication - Water - Building Services)

1. The consultant engineer shall review local departments concerned with services in the emirate to obtain the requirements that must be met in the building (from electrical power , communication rooms, and other services) as well as to know and determine the inlets and outlets of these services before finalizing the designs and plans..
2. Electrical rooms in buildings must meet the following requirements:
 - To be approved by Etihad Water and Electricity. (EWE).
 - Doors of the metering room must be of non-flammable material, have ventilation opening, and a ventilation fan must be provided in one of its walls.
 - Providing Security and Fire Safety requirements in accordance with the requirements of the Civil Defense Department.
 - The dimensions and design of the transformer room and electrical room shall be according to the number of transformers required and in accordance with the details approved by EWE, as follows:
 - 1 Transformer: Dimensions of Transformer Room are (5 × 5) m and Electrical Room (3 × 5) m.
 - 2 Transformers: Dimensions of Transformer Room are (5 × 8) m and Electrical Room (3 × 5) m.
 - 3 Transformers: Dimensions of Transformer Room are (5 × 11) m and Electrical Room (3 × 5).
3. Requirements and specifications for the design of telecommunications rooms in buildings shall be in accordance with the joint (In-Building Telecommunication Network - Specification Manual)

3.1 Dimensions and design of the main communication room, a communications room for typical floors, and mobile phone services rooms shall be as per the following table:

Table No. (54) shows dimensions of main communication room for various types of buildings

	Building Type	Main Communication Room (L x W x H) m	Communication Room for Typical Floors	Mobile Phone Services Rooms (L x W x H) m
1	Single Villa	No Requirements	No Requirements	No Requirements
2	Villa Complex	No Requirements	No Requirements	No Requirements
3		(2.00 × 2.00 × 3.00)	(0.60 × 1.00 × 3.00)	Floors Room

Building Type	Main Communication Room (L x W x H) m	Communication Room for Typical Floors	Mobile Phone Services Rooms (L x W x H) m
<ul style="list-style-type: none"> - Buildings with occupancy of up to 50 residents - Or Height up to (G+5 Floors) - Or Built-up Area of 3000 m² 	Or according to the Approved Drawing	Or according to the Approved Drawing	No Requirements Rooftop Mobile Phone Services Room (3.00 x 3.00 x 3.00) (Subject to G+10 Floors or less)
4 <ul style="list-style-type: none"> - Buildings with occupancy of 51:100 residents - Or Height up to 10 Floors (G + Basement + 10 Floors) - Or Built-up Area of up to 7000 m² 	(3.00 x 3.00 x 3.00) Or according to the Approved Drawing	(1.00 x 1.00 x 3.00) Or according to the Approved Drawing	Floors Room No Requirements Rooftop Mobile Phone Services Room (3.00 x 3.00 x 3.00) (Subject to G+10 Floors or less)
5 <ul style="list-style-type: none"> - Buildings with occupancy of 100:300 residents - Or Built up Area greater than 7000 m² 	(3.00 x 3.00 x 3.00) Or according to the Approved Drawing	(1.50 x 1.50 x 3.00) Or according to the Approved Drawing	Floors Room (3.00 x 3.00 x 3.00) (Every ten floors starting from the lowest ground/ basement floor) (Subject to G +10 Floors or more) Rooftop Room (3,00x3,00x3,00) (Subject to G +10 Floors or more)
6 <p>Buildings with occupancy of more than 300 residents</p>	(3.00 x 3.00 x 3.00) Or according to the Approved Drawing	(2.00 x 2.00 x 3.00) Or according to the Approved Drawing	Floors Room (3.00 x 3.00 x 3.00) (Every ten floors starting from the lowest ground/ basement floor) (Subject to G +10 Floors or more) Rooftop Room (3,00x3,00x3,00) (Subject to G +10 Floors or more)
7 <p>Shopping Centers and Malls</p>	(3.00 x 3.00 x 3.00) Or according to the Approved Drawing	It will be determined during NOC Issuance Phase	It will be determined during NOC Issuance Phase

	Building Type	Main Communication Room (L x W x H) m	Communication Room for Typical Floors	Mobile Phone Services Rooms (L x W x H) m
8	Buildings with their own Technology Network, Hotels, Palaces, Government Buildings, Hospitals	(3.00 × 3.00 × 3.00) Or according to the Approved Drawing	It will be determined during NOC Issuance Phase	It will be determined during NOC Issuance Phase
9	Warehouses and Factories Complex	(2.00 × 2.00 × 3.00) Or according to the Approved Drawing	It will be determined during NOC Issuance Phase	N/A
10	Masjed/Mosques and Worship Places follow the same specifications as Villas	It will be determined during NOC Issuance Phase		

3.2 Dimensions of telecom room for mobile services shall be according to the following table:

Table No. (55) shows dimensions of telecom rooms for mobile phone services according to number of floors

	Number of Floors	Mobile Phone Services Rooms (L x W x H) m	Rooftop Rooms (L x W x H) m
1	Up to (G+10 Floors)	N/A	(3.00 × 3.00 × 3.00)
2	(G+ 11 Floors) : (G+ 100 Floors)	(3.00 × 3.00 × 3.00) (Every ten floors starting from Basement Level/ Ground Floor)	(3.00 × 3.00 × 3.00)
3	Commercial Centers and Mega Service Centers	Guidance will be made during NOC Issuance Phase	Guidance will be made during NOC Issuance Phase
4	Group of buildings whose height exceeds G + 5 Floors	Guidance will be made during NOC Issuance Phase	Guidance will be made during NOC Issuance Phase

3.3 Loads that must be considered during the structural floor design of the communication room are determined according to the following table:

Table No. (56) shows loads for floor design of communication rooms

	Communication Room Type		Suspended Floor
1	Main	Residential Buildings	N/A
2	Telecommunication Room	Multi-use Buildings and Commercial Buildings	It will be determined during NOC Issuance Phase

Communication Room Type		Suspended Floor
3	(MTR)	Shopping Centers and Malls
4		Buildings with their own technology network
5	GSM Services Rooms	
6	Rooftop Telecom Room	

3.4 General Requirements

- In multi-storey buildings, communication rooms must be placed in a vertical alignment and connected to a common vertical raisers system without prejudice to the minimum dimensions of the rooms.
 - Communication rooms should not be under or near wet spaces or water sources such as (shower rooms - bathrooms - hand washing areas - ablution - swimming pools - garbage rooms).
 - Communication rooms should be kept away from the following sources: (heat - humidity - corrosive climatic or environmental conditions - radio frequency interference - electromagnetic interference).
 - If a design is submitted for technical compelling reasons that includes the presence of a part of a communications room near a water source; the solution must be approved at the design stage by the concerned party, which is the installation of a floor filter (raised tiles) and an automatic submersible pump to face any risk of water entering the room in addition to sensors to detect water leaks into the room.
 - Main communication room must be on the ground floor or the basement, its doors must be opened to the outside, the width of the door is not less than (1.00 m) and the height (2.10 m), and it must be of two hours fire-resistant.
 - Requirements for communication rooms must comply with the in-building communications network specifications manual issued by Telecommunications Regulatory Authority.
4. Water and Electrical Meters for residential units shall not exceed one water meter and one electricity meter for each separate residential, commercial or office unit, according to the approved drawing. It is not permitted to provide additional meters for blocks in homes, residential villas, and gyms on the roofs or when the buildings are separated or part of them is separated without permission from the Concerned Department or the separation of the first floor from the ground floor in the houses and residential villas consisting of two floors.

5. All building elements must be provided with the necessary electrical wirings, telephone and television wirings, and all necessary requirements of electrical rooms, telephone rooms, internal and external extensions must be provided in accordance with the specifications and conditions approved by the local departments in the Emirate, and service elements are excluded from telephone and television extensions.
6. All manufactured materials for service facilities must be in full compliance with the conditions and specifications approved by the Concerned Departments, and that the doors of service rooms must be opened to the outside.
7. A signboard must be provided at the entrances to the buildings, and it should be taken into consideration that it is close to the elevator and in a clear place for all multi-storey buildings in which the number of apartments or offices exceeds (10) apartments or offices.
8. The places for placing signs for all stores, exhibitions and commercial activities must be determined. The width of the signs should not be less than (1.00 m) and that they are in accordance with the conditions and specifications stated in the applicable legislation.
9. It is taken into consideration not to install any advertisement board or write any advertisement on the building or establishment or inside any plot of land except after obtaining the necessary license for this from the Concerned Department.
10. When placing any equipment, service devices, water tanks, or satellite dishes, the necessary architectural treatments are taken into consideration to prevent distorting the General Appearance of the building.
11. When designing residential apartments, spaces or means must be provided to hang and dry laundry in a way that prevents it from appearing outside or distorting the general appearance.
12. The architectural treatment of the facades must be made to cover the air-conditioning units in a way that prevents distorting the general appearance. The distance between any air conditioner and the neighborhood boundaries should not be less than (1.00) m.
13. All requirements and specifications mentioned in the approved thermal insulation regulations must be observed when preparing studies and designs and when implementing various buildings.

Article (42): Water Supply

1. The used materials, their specifications, network design and the workmanship for water installations must comply with the requirements and specifications of (EWE).
2. Every building or facility must be connected to the public water network unless its water supply is secured in any other way approved by the Concerned Department.

Article (43): Potable Water Tanks

1. Potable Water Tanks must be made of materials that are not rustble or corrosivable, and do not affect the natural or chemical properties of water, do not affect color, taste or smell of the water, they are not affected by heat or moisture, they are impermeable to light and have no harmful effects to human health.
2. Tanks must be provided with openings for cleaning of an appropriate size and that are able to be closed tightly and of the type designated for water tanks, that these openings are of sufficient capacity for a person to enter to conduct regular cleaning inside the tank, that their location is in a clean area, far from direct daily movement and from sources of pollution, and they are of high floor level.
3. The design of the tank must take into consideration the absence of an acute angle that causes the accumulation of dirt or germs or hinders the periodic cleaning operations.
4. The tanks must be provided with openings for filling water, distribution, drainage of washing water and aeration in sizes appropriate to the size of the tank, taking into consideration that the distribution holes are at a height not less than (6) cm from the level of the tank bottom, washing water drainage holes inside the bottom of the tank, and the openings for filling the tank and ventilation in the upper part Of the tank, that these openings are equipped with valves to control the opening and closing, that the ventilation pipe is designed in a way to prevent the entry of any materials or insects that may contaminate the tank, that all these openings and connections are made of stainless materials and have no harmful effects on human health.
5. The tank must be placed in clean places far from any source of pollution, and it must be raised on posts at a distance of not less than (20) cm from the floor, taking into consideration the installation of the tank in a way that does not affect the insulation layers of the surfaces. It is preferable that the tank be placed in a shaded place and that the tank does not appear in a way that distorts or impedes movement on the surface.
6. Water tanks must be cleaned once every (six months at least), taking into consideration that the materials used for cleaning do not contain toxic or harmful substances to Public Health, and sanitary conditions must be strictly observed in the cleaning process.
7. It should be taken into consideration that the location of the water tanks is chosen so that they are as far as possible from the sewage lines, manholes, septic tanks and cesspits. In all cases, it is not permitted to construct it outside the approved building line from the side of the street, or to place sewage lines above or next to water tanks, if they are located below the level of the ground surface.

8. Water Tanks capacity is calculated based on the actual needs of the building, as determined by the Concerned Department.
9. The inspector has the right to enter any building to conduct an inspection of water tanks to ensure that they comply with Health and Technical Regulations.
10. Underground water tanks must be designed according to the approved specifications and measurements by the Competent Department, with the use of approved appropriate materials by the Concerned Department.

Article (44): Sanitary Work

44.1 Sanitary Works Terms and Conditions

1. The following documents and drawings must be submitted as a minimum for Sanitary Works when applying for a Building Permit:
 - Receipt of payment of fees for delivering sanitation, if there is a public sewage network and the document of the location of connection (home connection) to this network.
 - The regulations and specifications drawing for sanitary works according to the instructions of the Competent Department must be signed and approved by the consultant engineer.
 - Sitting out plan showing public sewage lines in the area surrounding the plot, the last inspection chamber and the location of the home connection with the public sewage network lines, their levels, septic tanks and cesspits in the absence of a public sewage network.
 - All sanitary works drawings and water works for all buildings.
 - Any documents or other details requested by the Competent Department.
2. The surfaces of toilets, urinals, and wash basins must be soft, easy to clean and non-absorbent, and these fixtures must be made and installed in such a way as to secure the drainage of what is in them without storage through a water trap protected from evaporation and dryness of its water. Flush tanks for toilets and urinals must also be of an efficient type capable of cleaning up waste residues and withstand operating stress in public places.
3. In buildings whose height is less than (20) floors, the sanitation of the ground floor shall be connected separately and directly to the inspection chamber, and shall not be connected to the same vertical stacks (pipes) of the upper floors.
4. In buildings with more than (20) floors, the sanitation of the ground floor shall be connected separately and directly to the inspection chamber, and shall not be connected to the same vertical stacks (pipes) of the upper floors.

5. The internal sanitation system of the buildings shall be provided with the necessary vent pipes and in sufficient sizes to perform properly. The internal diameter shall not in any case be less than (5) cm in the internal connections and (7.5) cm in the vertical pipes and shall be mounted vertically and raised to a minimum distance of (1) m above the highest opening in the building and at a horizontal distance not less than (2) m. The Competent Department may request lifting the ventilation shaft or moving it further from the openings more than what is mentioned for technical reasons. The ends of the pipes shall be covered with their respective covers.
6. Flushing water from bidets shall not be drained to the floor traps or the ordinary sewer lines and shall be drained directly to the work stack pipes or manhole through the deep water faucet.
7. The work pipes and ordinary sewer pipes buried underground shall be made of strong and durable materials, as well as its diameter and slopes shall be in accordance with the specifications issued by the Competent Department. also its connections shall be air-proof and not result in any obstacles inside the pipes it shall be able to withstand pressure at least a minimum height of (3.00) m of water. these pipes shall installed and smearing is to suit the soil conditions and loading and in accordance with the instructions of the manufacturing company.
8. A manhole shall be installed at each turning point of the sewage pipes, the gradient of the pipe changes or the pipeline is connected to another. The distance between the two manholes shall not exceed (15) meters. The manhole shall be in accordance with the specifications issued by the Competent Department.
9. It is not permitted to build manholes inside buildings, except in courtyards, corridors, service rooms, parking and corridors with adequate ventilation. They shall be dry and sanitation pipes extending under the floors and walls shall be protected against any external works or from the floors settlement. Clean-outs shall be secured at distances not exceeding (10) m.
10. All manholes shall be built within the boundaries of the parcel. When designing and locating inspection chambers, choosing the location and the appropriate levels for the last inspection chamber shall be taken into consideration for ease of connection to the Public Sewerage Network and to the conditions of the Relevant Entity.
11. All the sub-floors (basements) shall be equipped with the appropriate means and equipment for drainage and water filters such as (sand leakage rooms – pumps - grease traps -etc.). If grease traps are not required in the current design, allocation shall be made to be installed when required.
12. It is not permitted to pass the sewage pipes through columns, beams, foundations and electricity rooms unless the Competent Department approves that. In such cases, sleeves in the concrete shall be made to allow pipes to pass through. The pipes shall be supplied with the necessary flexible connections.

13. In the case of draining large amounts of grease or oils to the sewerage network in restaurants, kitchens or etc. a grease control valve shall be installed with an Approved Design.
14. Commercial and industrial waste shall not be disposed to the public sewerage network without the approval of the Relevant Department. This approval shall be granted only if the appropriate equipment is available for the initial treatment of such wastes. It is not permitted to draining the water of the heaters, which have a temperature above (37) ° C, to the Public Sewerage Network before cooling it.

44.2 Sanitary Benefits Requirements

1. Minimum sanitary benefits that must be provided in specialized and public buildings that are not mentioned in this regulation shall be in accordance with special studies, specifications and international standards (provided that the study is submitted for approval of the Competent Department).
2. 50% at least of these sanitary benefits (toilets) in places of public activities are of an oriental style.

44.3 Septic Tanks

In the absence of public sewage network in the area in which the building is to be constructed, the building must be provided with septic tanks, drainage or assembly tanks in accordance with the requirements of the emirate wastewater authority with the following conditions being met:

1. It must be within the boundaries of the plot, and its construction must not be outside the approved building line from the side of the street.
2. To be close to the street or Sikka, away from the main building and neighborhood, and easy to access for cleaning, maintenance and unloading. The Competent Department shall agree to this location. It shall also be easy to connect to the Public Sewage Network in the future.
3. These tanks must be of non-permeable reinforced concrete, and the ceilings of these tanks shall be designed to withstand the passage of cars over them if necessary.
4. An adequate dimensions access opening with a heavy duty cover that can be sealed shall be provided.
5. The top level of its roof shall not exceed the level of the ground in which it is located.
6. The capacity of these tanks shall be appropriate and calculated on the basis of daily consumption according to standards.
7. It must be at a distance of no less than (1.00) m from the neighboring buildings and boundary walls, and its depth shall not be less than (1.50) m below the bottom level of the inlet pipe.
8. In areas where the groundwater level is high or the rate of water drainage in them is insufficient through the soil, tanks must be built to collect wastewater until it is transported to points determined by the Concerned Department.

9. Septic tanks shall be designed in accordance with the standard specifications approved by the Concerned Department. Septic tank shall be provided with a ventilation pipe in accordance with the conditions of the Competent Department. All its openings shall be covered to prevent insects to enter and exit.
10. Excepting for residential buildings, grease traps in kitchens and food processing areas shall be provided.

44.4 Rainwater Drainage

1. It is required to ensure the proper means of collecting and disposing of rainwater to avoid moisture penetration.
2. The roofs of all buildings shall be finished with a slope of not less than (1:50) up to (1:70) that allows water to flow in channels and reach spouts connected to drainage pipes or suitable gutters for this purpose.
3. All channels, gutters, spouts and drainage pipes shall be with a slope of at least (1:90). They shall be made of durable materials and waterproofing connections of sufficient sizes and shall be firmly and securely installed.
4. Rainwater shall not be drained in sewage pipes, in septic tanks, in cesspits or to neighbours, but shall be surface drained to the streets and sikkas. rainwater may be drained directly into the public rainwater network or percolating tanks in coordination with the Relevant Entity.
5. It is not permitted to drain air conditioners condensation water or balconies water directly on the streets or to the rain drainage lines but rather into the public sewerage system.
6. Wastewater shall not be drained into the rain drainage network for any reason.

Article (45): Swimming Pools

45.1 Swimming Pool Permit Requirements

1. Swimming Pools may not be constructed, whether under, above, or on the land or building prior to the issuance of a Building Permit for the proposed buildings in the plot from the Competent Department.
2. All requirements for the construction and operation of swimming pools stipulated in the applicable environmental legislation in the Emirate must be adhered to, and the engineering and structural design of the swimming pool shall be reviewed by the Competent Department. It is also required to obtain initial approval from the Public Health Department to permit swimming pools, the Concerned Department may exclude swimming pools in private residential buildings from some of these requirements.

3. Setbacks of the swimming pool from the surrounding boundary walls and walls of the buildings must not be less than (1.50) m. It is not permitted to construct the swimming pool outside the approved building line from the street side.
4. Subject to any other conditions or requirements stipulated in the environmental, health and public safety legislation, the swimming pool must include all safety and public health requirements, and in particular the following:
 - Water filters and recycling system in the pool.
 - Disinfecting and purifying water in the pool.
 - Other control measures for safety and public health have been taken at the design stage and operating time.

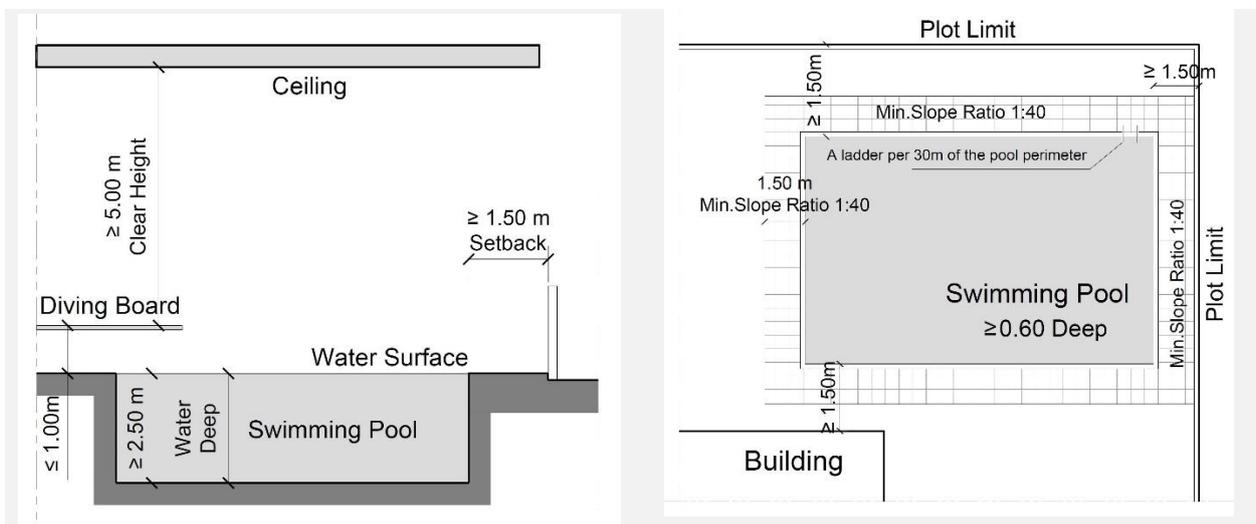


Figure No. (25) illustrates some of Swimming Pools Requirements
 Right: Example of Swimming Pool Setback
 Left: Example of required height above a diving board and an appropriate swimming pools depth.

45.2 Swimming Pool Systems

1. Overflow Gutters Swimming Pools

This system should be used when the water surface area of the pool reaches (3.80) m² or more, and overflow drains are provided around the entire swimming pool.

2. Surface Skimmers Swimming Pools

It is allowed to use this system in swimming pools whose water level is less than (3.80) m², and the drains of this system maintain a specific level of the water surface in the swimming pool.

45.3 Swimming Pools General Requirements

1. Swimming pools shall be provided with stairs according to the following requirements:

- The pool shall be provided with steps and stairs if the depth exceeds (0.60) m.
 - At least one stair shall be provided for each (30) m of the pool circumference.
 - The stair shall be corrosion resistant and equipped with a slip-resistant foothold at a (10) cm distance from the wall.
 - If providing internal steps in the niches of the pool; these steps shall be of non-slippery and self-drained surfaces provided that the minimum height of the foothold is (15) cm and the minimum width is (30) cm.
 - The pool shall be equipped with side handrails that extend above the surface of the pool and return to the horizontal surface of the pool at each side of each stair or step fixed in the niches.
 - It is permitted to build pools with steps only if the pool is shallow and its depth does not exceed (1) m.
2. Public swimming pools must be surrounded by a boundary wall or enclosure whose height is not less than (1.29) m, and no openings are allowed in which a ball of diameter (10) cm passes, and it is equipped with a self-closing system and self-locking doors.
 3. Swimming pools must be equipped with showers and sinks for feet at a rate of (1) for each (25) m of the perimeter of the pool. The swimming pools must be provided with toilets and changing rooms in proportion to the perimeter of the pool, and with a minimum of (1) toilet, shower and changing clothes room for each Gender separately.
 4. Pylons and diving boards shall be in accordance with the following requirements:
 - Free spaces shall be provided above the diving board up to (5) meters at least for head movement.
 - Diving boards shall be covered completely with non-slip materials.
 - The minimum depth of water below any diving board at a distance of (1) m below the surface of water shall be at least (2.5) m. The depth of the diving water for the boards above (1) m is increased by (0.30) m for each (1) m or more.
 - A (3.0) m horizontal distance shall be provided between the adjacent diving boards and any diving board and side wall.
 5. Swimming pools shall be provided with enough lighting (under or above water) to provide lighting for the entire pool including the bottom without causing any reflections, glare, burns, electric shocks or physical injuries.
 6. Each electric circuit shall have a breaker for earth leakage circuit breaker.

7. The swimming pool shall be provided with a suitable safety cover that complies with the standard specifications (ASTM F 1346) to protect children under five years of age when the swimming pool is not used.
8. The swimming pool must be surrounded on all sides by flat non-slip surfaces, of no less than (1.50) m, with a slope ratio of (1: 40) in a direction opposite to the swimming pool, as well as providing these surfaces with appropriate drains for water drainage.
9. Signs indicating the depth of the water shall be placed at the edge of the roof or on the wall of the pool, at the lowest and maximum depth, and at the point of breaking the slope.
10. Swimming pools shall be provided with exit drains, skimmers, hair and impurities filters, filtration devices, clearance equipment and safety and rescue equipment in accordance with approved environmental regulations.
11. A special place must be provided for placing a high chair for the lifeguard and a special place for placing signboards for users of swimming pools.

Article (46): Gas Storage

46.1 Gas Cylinders

1. The design of places for placing or storing household / residential gas cylinders must be in a well-ventilated, covered place outside the kitchen or living area, and all gas installations must be in accordance with the Standard Specifications approved by the Relevant Entity.
2. Cylinders Store in Public Buildings must be well ventilated and easy to access to replace empty cylinders and easy to isolate and fight fire in it in emergencies.
3. Gas tanks for scientific laboratories in educational buildings must be on the ground floor and open from outside the building.

46.2 Central Gas Tank

Central gas tank must be approved in the buildings according to the requirements of the Civil Defense. The owner of the building must conduct an annual examination of all connections and pipelines that deliver gas to the residential units to ensure their safety and the absence of any leaks in them.

46.3 General Requirements

1. All cylinders stores must be equipped with alarm and firefighting systems in accordance with the Specifications and Requirements of Civil Defense, and the maintenance of firefighting equipment is done periodically.

2. All gas extensions must be in accordance with the approved standard specifications by the Relevant Entity.
3. Combustible materials such as car tires, cartons and paper should not be stored with gas cylinders.

Article (47): Waste Rooms and collectors

47.1 General Requirements

1. Residential, industrial, educational, health, recreational and tourist buildings and complexes must be provided with waste collectors within the boundaries of the plot and within the boundry wall of the building, or in a room established on the ground floor of the building itself in order to collect waste in preparation for its transportation outside the building for disposal .
2. Specifications of the waste rooms are as follows:
 - To be established in a place near the road or sikka in the absence of a road to facilitate the process of removing containers and delivering them to waste collection vehicles without obstacles.
 - Entrance sizes must be suitable for easy of entry and exit of containers. The entrances must be provided ramps with ramps suitable slopes for this purpose.
 - The sizes and areas of rooms and collectors shall be in accordance with what is specified in Clause (47.2) of this Article.
 - The floor and the entire height of the room walls should be made of ceramic tiles so that they can be easily cleaned.
 - It must be supplied with water directly from the network or from the Lifted water tank, and it should be connected with the building's sewage lines.
 - It shall be well lit and provided with a good ventilation system.
 - All windows must be sealed and equipped with a soft metal sieve to prevent the entry and exit of insects and rodents.
 - The door of the assembly room must be made of a stainless metal material (aluminium), with a Louver or any mechanical ventilation system provided from the bottom, and the direction of opening the doors to the outside.
 - That the garbage container collector is on the ground floor and its floor level is not less than the specified areal reference, and that its entrance is connected to the street through a ramp with a suitable slope, and that it is tiled with washable ceramic tiles and provided with a water point sources.
3. The owner of the building or whoever authorizes him shall be responsible for the cleanliness inside the building and the external areas surrounding and subordinate to it up to the borders of the public

street. As well as for transporting and delivering the waste containers from the waste rooms to the nearest street at the specified times, with the containers being returned to the rooms after the completion of the emptying process.

4. The compactor is not a substitute for the number of containers or the size of the waste room.
5. If the location of the chute is far from the streets surrounding the ground, a waste collection room can be made in a place near the street or from the Sikka in the absence of a road.
6. It is prohibited in any way to throw active chemical wastes, toxic substances, liquids or hazardous materials into waste containers.
7. To contribute to protecting the environment, we must work on recycling the use of garbage by allocating and classifying waste containers according to the main types of discarded materials.

47.2 Waste Rooms and collector Dimensions

1. In buildings with an area of less than (250) m² and the height exceeds three floors above the ground floor, a garbage room shall be provided on the ground floor only its dimensions (1.00 × 1.50) m² with mechanical ventilation and a door of not less than (90) cm wide, provided with door closer.
2. In buildings with an area of (250) m² or greater and no more than (G+ 3) Floors , no need for a chute system, small rooms must be provided to collect garbage bags on each floor of an area of not less than (1.00X1.50) m², provided that the width of the door of this room is not less than (0.90) m, that it opens to the outside and is equipped with a self-closing unit (Door Closer) with the provision of mechanical ventilation. It is not permitted to carry out ventilation through louver in the door, and to provide a room for waste on the ground floor in these buildings, provided that its area is not less according to Table No. (57) with the provision of the general requirements mentioned in clause (47.1) of this article.
3. In buildings whose height is more than (G+3) Floor, a chute system must be provided with a waste room on the ground floor. The mezzanine is not considered to be flat if its use belongs to the ground floor, provided that its area is not less in accordance with table No. (57) with the provision of the general requirements mentioned in clause (47.1) of this article.
4. **Garbage Chute Pipe Requirements:** its diameter from the floors to the collection room must not be less than (0.60) m in addition to a minimum of (0.20) m for fixing the pipe to the wall, provided that the waste dumping openings in the repeated floors are preceded by a small room with an area of not less than (1.00 × 1.00) m² and the width of the door of this room should not be less than (0.80) m, and the door must open to the outside with the installation of the self-closing unit.
5. The chute can be replaced by an alternative service elevator that is in an isolated area from the main elevators, with the creation of small collective rooms with the elevator area on each floor so that the elevator is close to the main waste rooms in the building.

Table No. (57) shows the capacity of the waste room according to waste amount and number and capacity of containers

Waste Amount		Number and Capacity of Containers
1	Up to 100 kg of waste	A room that accommodates one container with a capacity of (1.2) m ³
2	Up to 250 kg of waste	A room that accommodates one container with a capacity of (2.5) m ³ or two containers with a capacity of (1.2) m ³ per container
3	Up to 500 kg of waste	A room that accommodates two containers with a capacity of (2.5) m ³ per container. Figure No. (27).
4	Up to 750 kg of waste	A room that accommodates (3) containers with a capacity of (2.5) m ³ per container.
5	Up to 1000 kg of waste	A room that accommodates (4) containers with a capacity of (2.5) m ³ per container.
6	+ 1000 kg of waste	The number of waste rooms is determined according to a special study, or the same previous equations are calculated on half of the amount in excess of (1000) kg.

Waste quantities are calculated according to the rates listed in the following table.

Table No. (58) clarifies the determination of the average quantities of waste in buildings according to use

Use		Average Amount of Waste
1	Residential	(12) Kg for each (100) m ² of the utilized area.
2	Commercial	(12) Kg for each (100) m ² of the utilized area.
3	Office	(5) Kg for each (100) m ² of the utilized area.
4	Hotels	(3) kg per room and (5) kg per suite, and the rest of the items according to the type of activity.

6. In residential villas, the following must be observed:

In investment villa complexes, waste collection rooms are provided according to the specifications specified in clause (47.1) of this regulation and according to the following table:

Table No. (59) shows the calculation of capacity and number of containers according to the number of villas

No. of Villas	Capacity and Number of Containers
4:10	(1) container with a capacity of (2.5) m ³
>10: 40	(1) container with capacity of (2.5) m ³ is calculated for each (10) villas.
> 41	In the event that the number of villas in one complex exceeds (40) villas, (1) container capacity of (2.5) m ³ shall be calculated for each (10) villas. A study shall be presented of the mechanism for collecting waste from villas and transporting it to collection stations equipped with pressure containers, provided that this mechanism is approved by the Concerned Department.
The number of rooms must exceed one room in the event that the number of containers in one complex exceeds what is specified in this article.	

7. To determine the areas of the waste rooms, the following measurements are taken:
 - The waste rooms shall accommodate all the required containers according to the approved measurements of the containers as follows:
 - The size of a container of (1.2) m³ is (1.35 × 1.90) m².
 - The size of a container of (2.5) m³ is (1.50 × 2.10) m².
 - A minimum space of (0.30) m should be left between the containers and the walls of the waste room.
 - A minimum space of (0.30) m should be left between containers with each other and from all sides.
 - A minimum space of (1.00) m should be left between the container and the front of the room in which the door of the waste room is located.
 - The width of the inner corridor of the waste room should not be less than (1.20) m.
8. The door to the waste room must be with a width that allows for easy removal and entry of containers, provided that it is not less than (1.80) m as a minimum.
9. Clear Height of the waste room must not be less than (2.50) m as a minimum.
10. The size of the waste room and its door depends on the method of distribution and circulation of containers inside it and the possibility of accessing and removing all containers, as shown in Figure (26).

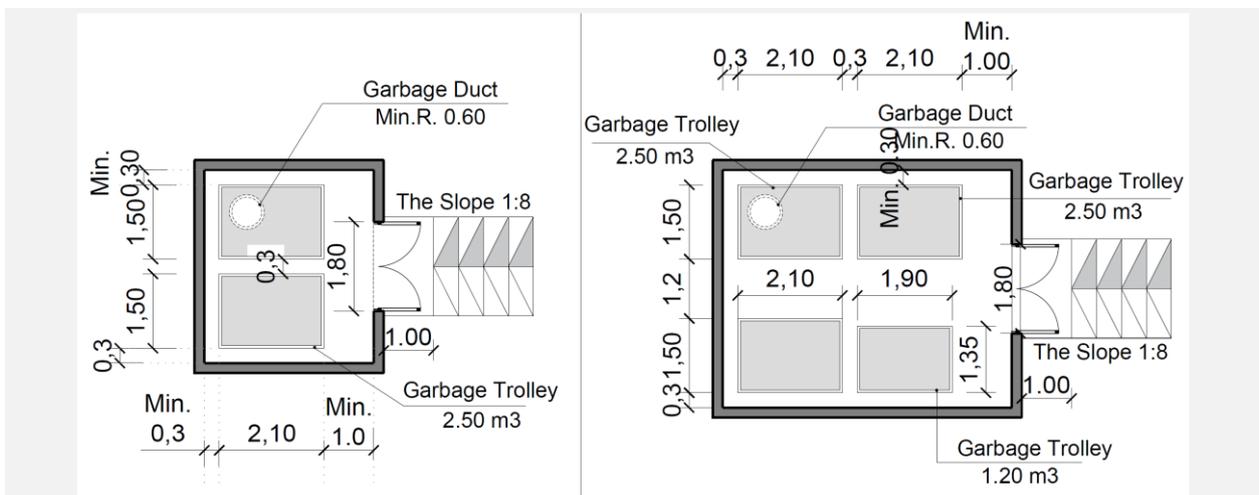


Figure No. (26) shows examples of the waste room on the ground floor.
 Left: Example of a waste room up to (500) kg. Right: Example of a waste room up to (1000) kg.

11. In hotels and specialized establishments, it is permissible to provide a hydraulic compressor or to propose an acceptable alternative solution to the waste pipeline and to submit a study for this and the approval of the concerned authority, provided that the area and size of the waste room are not less than required.

12. A waste containers collectors must be provided in educational facilities that accommodate no less than two containers measuring $(2.50) \text{ m}^3$, one of which shall be allocated for paper and the second for the rest of the materials.
13. A waste containers collectors must be provided in health facilities that accommodate at least two containers measuring $(2.50) \text{ m}^3$ in addition to the special containers necessary for patient's rooms, offices and administrative spaces that are calculated on the basis of $(12) \text{ kg}$ for each $(100) \text{ m}^2$ of their net areas.
14. A waste containers collectors must be provided in labors' accommodation to accommodate the required number of containers, at a rate of $(2.50) \text{ m}^3$ for every $(950) \text{ m}^2$ of the total building area, with a minimum of one container.
15. A waste containers collectors must be provided in Industrial Facilities (warehouses or workshops of Light Industries) with an area of not less than $(3.00 \times 3.00) \text{ m}^2$ tiled with washable tiles and provided with a water point sources for washing, so that it accommodates the number of containers required at a rate of $(2.50) \text{ m}^3$ per container per $(1900) \text{ m}^2$ of Total Building Area. In areas of Heavy Industries, large specialized projects, and sports clubs, waste rooms and the type and number of containers are determined according to special studies approved by the Competent Department.
16. It is permissible to replace size and type of containers, or to propose an alternative solution acceptable to the Competent Authority for Waste chute Pipe in Industrial Areas, Labors' Housing, and some Specialized Projects, according to the approval of the Concerned Department.

Article (48): Construction Material Testing Certification

The Competent Department has the right to request any tests to certify the quality of building materials that are not approved in the emirate, which it deems necessary to take the appropriate decision regarding acceptance or refusal of building material approval, according to the standard specifications and requirements required in accordance with the approved construction materials quality control guidelines.

Article (49): Billboards (Advertising Signboard) attached to Buildings

Billboards attached to buildings, whether installed on the walls of buildings and commercial buildings, on storefronts, or placed on buildings roofs, must consider the architectural pattern and harmony of the place, requirements and specifications of the Competent Department and the legislation regulating it.

Article (50): Agricultural and Farms Buildings Standards and Requirements

If a request for a permit to build agricultural facilities (Green House) based on closed systems, the consultant must adhere to the approved "UAE Farms and green houses guidelines" (Appendix No. (1)).

Final Provisions

Article (51): Granting Permits Conditions

When granting a Permit, the following requirements must be fulfilled:

1. Fulfilling all the regulations and specifications stipulated in the Law, standards, guidelines and any Regulatory Decisions regulating the building construction.
2. Providing evidence that all necessary Procedures, precautions and measures have been taken to ensure the public safety of those in charge of implementation at the work site, passers-by, users of real estate and adjacent real estate, in accordance with Federal and Local Decisions, buildings regulations and Specifications, and procedures approved by authorities concerned with health, safety and the environment.
3. Ensuring that neighboring buildings are protected by taking all necessary precautions to ensure the structural safety of neighboring buildings from impacts resulting from the work of mechanical mechanisms and equipment, groundwater withdrawal, excavation and demolition procedures, and others in accordance with the Building Regulations and Specifications, Structural Design Requirements and Specifications "Codes" and the relevant references.
4. Provide evidence that all necessary procedures, precautions and measures have been taken to ensure the general safety of residents and users of the property, and take all measures to reduce noise and dust, and take necessary precautions to protect against fire, in the event that the permit relates to work in an occupied building.
5. The consultant if for any reason abandon its supervision of implementation, should notify the department in writing. In this case, the owner must appoint an alternate consultant office and notify the department accordingly.
6. Submitting a certificate(s) in accordance with the form prepared by the Department on behalf of / names of consultant assigned to carry out the specialized inspection and monitoring work mentioned in the specified codes.

Article (52): Drawing Modification and Permits Data while Working

If the Owner wants to change the approved/permitted designs and drawings, or change the consultant during construction. The modified drawings and data indicating the new changes must be submitted to the Concerned Department in order to be reviewed and approved when it is proven that they comply with the regulations and the relevant structural design codes.

Depending on the nature of the proposed change, an additional permit may be issued or an existing permit may be modified.

Article (53): Technical Committee

By a decision of the Director General, "Technical Committee" shall be formed, with the following Tasks:

- Technical interpretation of any of the technical clauses mentioned in this regulation or unclear standard specifications or criteria. the technical interpretation issued by the Competent Department through the technical committee is the approved interpretation of this clause or of this specification.
- Study any systems or construction materials submitted for approval in order to achieve the life span of the building and structural integrity.
- Study any proposals/recommendations that enrich the contents of the list submitted to the committee by business partners.
- Review the regulation and the operational procedures necessary to apply it periodically, propose the necessary amendments to it and the mechanisms for its development, and present them to the director general for inclusion in the list by a decision issued by him.

Article (54): Repeal of Resolution No. (18) of 2018

Resolution No. (18) of 2018 regarding the building regulations and specifications in Ras Al Khaimah shall be repealed.

Article (55): Effectiveness & Publication

This Regulation shall be effective from the date of its issuance and published in the Official Gazette.

Ras Al Khaimah Municipality

Director-General

Issued by us on /Jumada Al Akhra / 1444 A.H.

Corresponding to /January / 2023 A.D