



DHA KARACHI

BUILDING CONTROL AND TOWN PLANNING REGULATIONS 2020

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LIST OF ABBREVIATIONS

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Chapter I Preliminary

1.1 Authority: means the Pakistan Defence Officers Housing Authority established under Article 4 of the Presidential Order No. 7 of 1980 and all other powers in that behalf.

1.2 Rules for Town Planning and Building Control 2014: The Government Body in exercise of powers conferred under Article 22 of Presidential order 7 of 1980 was pleased to make rules for Town Planning and Building Control duly published/ notified on 16 July 2014 in the Gazette of Pakistan.

1.3 Regulations: Pursuant to the Town Planning and Building Control Rules 2014 dated 16 July 2014, the Executive Board exercised its powers conferred under Article 23 of the Presidential Order no 7 of 1980 and all other enabling powers to formulate Building Control and Town Planning Regulations 2020 vide special Executive Board Meeting No.2/ 2020 held on 19 August 2020.

1.3.1 It shall come into force with effect from 19 August 2020. These regulations supersede all earlier regulations & byelaws published by PDOHA.

1.3.2 These Regulations are hereby promulgated and published and will be implemented under the title of: "Pakistan Defence Officers Housing Authority Karachi Building Control & Town Planning Regulations 2020".

1.3.3 These Regulations are hereby promulgated under short title of "DHA Regulations 2020".

1.4 Application and Commencement: These Regulations will apply to the entire area falling within the jurisdiction of PDOHA Karachi.

1.4.1 The plot shall be strictly utilized for the purpose it has been allotted.

1.4.2 Every member, within the limits of PDOHA, intending to erect or re-erect a building, carry out addition or alteration to existing building or demolish the existing building, shall comply with the requirements of these Regulations.

1.4.3 Defaulting members are liable to disconnection of services and financial penalties.

1.5 Interpretation of Regulations: In case of any ambiguity in interpretation of these Regulations, PDOHA reserves the right to deliver/implement the interpreted contents of these Regulations.

1.6 Modification/Amendments: These Regulations shall be reviewed periodically and necessary amendments shall be incorporated from time to time.

1.7 Exemptions: Application of these Regulations can be relaxed for buildings erected by or on behalf of the Government/ Semi Government bodies and PDOHA, provided they are sound with respect to engineering, town planning and civic aspects. This is applicable for Residential, Commercial or Amenity Buildings.

Chapter II Definitions

2.1 Definitions: In these Regulations, unless there is anything repugnant in the subject or context: -

2.2 "Addition": The addition of any unit or part or structure to any building or structure constructed in accordance with these Regulations.

2.3 "Alteration": Any change made after the approval of building plan without affecting or violating any provision of these Regulations.

2.4 "Amalgamation": The joining of two or more adjoining plots of the same land use into a single plot in accordance with these Regulations.

2.5 "Amenity Plot": A plot allocated exclusively for the purpose of amenity uses such as government offices, diplomatic missions, health, welfare, public utilities, education, worship places, burial grounds and recreational areas etc.

2.6 "Ancillary Building": A building subservient to the principal building on the same plot e.g. servant quarters, garages and guardroom etc.

2.7 "Apartment": An independent residential unit in a building consisting of at least one bedroom, a living room, a bathroom and a kitchen.

2.8"Approved": Approved in writing by the PDOHA/ CBC.

2.9 "Arcade": A covered walkway or a veranda between the shops and the road or street on which the shops abut.

2.10 "Architect": A person registered with Pakistan Council of Architects and Town Planners (PCATP) as an Architect.

2.11 "Architectural Plan": A plan showing the arrangements of proposed building works, including floor plans, elevations and sections, in accordance with the requirements of these Regulations.

2.12 "Area": The area of jurisdiction of PDOHA, Karachi as shown in the Master Plan and including any extension or modification effected therein, from time to time.

2.13 "Attached Building": A building which is joined to another building on one or more sides.

2.14 "Authority" for the purpose of these Regulations: The Pakistan Defence Officers Housing Authority established under Article 4 of President's Order No. 7 of 1980.

2.15 "Balcony": A roof or platform projection from the walls of the building surrounded with a railing or parapet walls.

2.16 "Basement": Portion of the building partially or completely below natural ground level or approach road level.

2.17 "Bathroom": A bathroom is a room for personal hygiene activities, generally containing at minimum a toilet, sink, bathtub or tray and mirror.

2.18 "Building": A house, outhouse, stable, latrine, shed or other roofed structure whether of masonry, brick, wood, metal or other material and any part thereof, and includes a wall (other than a boundary wall not exceeding 10'-0" in height and not abutting on a street) but does not include a tent or other portable and temporary shelters.

2.19 "Building Line": A line up to which any part of a building from its lowest level, including any/ all foundations, or other structure, abutting on a public street or a road, planned future public street, may extend, provided always that such line is within the property line of such building or cut line as provided in these Regulations of such plots.

2.20 "Building Plans": The plans showing the proposed details of the arrangements of intended building works within the property line.

2.21 "Building Works": Site excavation, erection or re-erection of a building or making addition/alteration to existing building.

2.22 "Byelaws /Regulations (PDOHA)": A set of laws essentially required to regulate, all types of Development and Construction activities within legal bounds of PDOHA, to be implemented by all persons and PDOHA.

2.23 "Business Zone": A zone in PDOHA Phase-VIII with the name "Business Zone" dedicated for commercial activities. Business Zone is expected to be the hub for all business, commercial, office, retail, residential, leisure and recreational activities.

2.24 "Carpet Area": The net floor area within a habitable, rent-able or saleable unit excluding the area of peripheral walls but including the area of internal walls and columns.

2.25 "Car Porch": A shelter or a shed for a car/ vehicle, which is permanently open on at least two sides.

2.26 "Commercial Building/ Plot": A building constructed for commercial use on a commercial plot and may have a combination of commercial (including shops, Shopping Malls / Centres, show-rooms, stores / godowns, ware-houses, hotels, clubs etc.) and residential (Apartments) units/floors. Also, refer to general conditions of commercial buildings.

2.27 "Competent Authority": President Executive Board/ Administrator of PDOHA Karachi or any other officer empowered by the Authority. Exercise administrative, executive, financial powers, do all act and works, which may be exercised or done by the authority. Competent Authority to exercise the power in routine functioning and to approve (new, revised, addition etc.) and cancellation of the plans and to control all aspects of building activities in PDOHA.

2.28 "Completion Plan": An "As Built Plan" submitted to the PDOHA for the purposes of obtaining approval and occupancy certificate.

2.29 "Compulsory Open Space (COS)": Minimum part of a plot, which is to be left completely and compulsorily open to sky under the Regulations, over which no structure, or any integral part of the building will be permitted.

2.30 "Contractor": a person or firm that undertakes a contract to provide materials or labour to perform a service or do a job.

2.31 "Corner Plot": A plot situated on minimum two vehicular streets and will have chamfer as per these Regulations.

2.32 "Covered Area" (for purpose of determining the floor area):

The sum of the gross horizontal areas of the floor(s), including verandas, pergola (minimum 25% of the area covered by pergola), but excluding shades/projections (not exceeding the maximum permissible limits).

2.33 "Detached Building": Building not joined to other building on any side.

2.34 "Duplex": Two identical residential housing units existing under the same roof with a common wall dividing the first unit from the other at all levels with separate entrances/ gates.

2.35 "Efficient Energy Use": To reduce the amount of energy required to provide products and services.

2.36 "Engineer": A person currently registered with Pakistan Engineering Council (PEC) as an engineer.

2.37 "Erection of Building": Construction of building in defined premises/ boundaries, which may include the structural alterations for making any additions to an existing building.

2.38 "Existing Building": A building existing on ground on the date of the commencement of the plan.

2.39 "External Wall": Any outer wall of a building abutting on an external or internal open space on adjoining property lines.

2.40 "Extra Land": Any additional piece of land existing adjacent to any type of plot/ building.

2.41 "Fire Escape/ Exit": An emergency exit from a building that maybe used in the event of fire.

2.42 "Flats": Block(s) of building consisting of number of residential units built in a horizontal/ vertical manner designed for human habitation.

2.43 "Floor Area": Horizontal area of floor in a building covered with roof, whether or not enclosed by walls but excluding ancillary covered spaces and projection allowed under these Regulations.

2.44 "Floor Area Ratio (FAR)": The total floor area of a building as permissible under these Regulations divided by the area of the plot.

2.45 "Footprint": The portion of a plot covered, at any level, by a building or part thereof other than basement, ramps upward/ downward and driveways.

2.46 "Form": Form appended to these Regulations.

2.47 "Foundation": A structure made of RCC or any other building material, designed to bear and distribute the load of building, also catering seismic parameters, onto the ground through columns, pillars, beams or walls made of RCC or any other building material.

2.48 "Frontage of Corner Plot": In case of plots abutting on more than one road, frontage will be with reference to the road mentioned in the allotment/ transfer letter.

2.49 "Gallery": An open or covered walkway or a long passage.

2.50 "Grey water": It is all wastewater generated in households or office buildings from streams without faecal contamination, i.e. all streams except for the wastewater from toilets.

2.51 "Grease Trap": A plumbing device (a type of trap) designed to intercept most greases and solids before they enter a waste disposal system. Such traps are also known as grease inceptor, grease recovery device, grease capsule and grease converter.

2.52 "Green Roof": The development / creation of vegetated space integrated structurally on top of a man made structure. Commonly known as Roof Garden.

2.53 "Half Bath": A bathroom is a room for personal hygiene activities generally containing at minimum a toilet and sink.

2.54 "Handicap": A mental or physical disadvantage, such as blindness or a missing leg or a body part etc. that disables a person in some way.

2.55 "Head Room": The clear vertical distance measured between the finished lower level and the underside of lowest obstruction such as ceiling or rafter, whichever is lower.

2.56 "Height of Building": The vertical measurement from the title road (highest point of the title road) to the highest part of the building.

2.57 "Height of a Room": The vertical distance measured between the finished floor level and under side of the ceiling.

2.58 "House or Bungalow": An independent residential unit for the use of people, a family having at least one habitable room, bedroom, kitchen and bath/ toilet.

2.59 "HVAC (Heating, Ventilating, and Air-Conditioning)": It is the technology of indoor and vehicular environmental comfort. Its goal is to provide thermal comfort and acceptable indoor air quality.

2.60 "Industrial Building": A building constructed on a plot allotted exclusively for the purpose under these Regulations.

- 2.61 "Inter Floor":** A floor provided between two main floors of the building.
- 2.62 "LED (Light Emitting Diode)":** A two lead semiconductor light source.
- 2.63 "License":** Permission granted by the PDOHA to perform such functions as allowed under these Regulations.
- 2.64 "Licensee":** An individual/ firm holding authorized license to work in PDOHA.
- 2.65 "Light Industries":** Building(s) providing work place free from any obnoxious industries / trade such as chemicals, explosives, noise producing and smoke/smell emitting industries, etc.
- 2.66 "Light Reflectance Value (LRV)":** It is a measure of visible usable light that is reflected from a surface when illuminated by a light source.
- 2.67 "Loft":** A space just below the roof of a building that is used for storage purpose i.e. horizontal slab. Lofts are allowed in kitchens, baths, shops and storerooms with access from inside only.
- 2.68 "Low Car Porch":** Car porch having height not more than 8'-0" from floor to ceiling of the porch.
- 2.69 "Mezzanine":** Any floor inter-posed between ground and first floor of a building and having headroom not less than 6'-0" and not more than 7'-0".
- 2.70 "Mumty (Stair Tower)":** A structure with a covering roof over a main staircase and its landing built to enclose the stairs for the purpose of providing protection from weather.
- 2.71 "Nuisance":** Includes any act, omission, place or thing which causes or likely to cause injury, danger, annoyance or offence to the sense of sight, smell or hearing or which is or may be dangerous to life, health or property.

2.72 "Obnoxious Industries / Trade": It includes, amongst others, bricks kilns, coke ovens, salt glazing, sulphur working, making of cellulose lacquer, pitch bitumen, charcoal burning, gut scraping, tannery, glue making, fish meal, soap boiling, tallow making, skin dyeing and those which may be specified as Obnoxious by the Industries Department from time to time.

2.73 "Open Staircase": A staircase in a single storey or two storeys (ground and first floor) building of which the roof must be fully open to the sky and of which at least two sides must be fully open and clear of any adjoining walls of the building.

2.74 "Owner": A person registered as member in PDOHA holding title to a piece of land with or without construction thereupon.

2.75 "Park": A recreational area, developed as such having greenery i.e. Plantation/ grass which may include all or any of the following facilities.

2.75.1. Jogging track/Walk-ways.

2.75.2. Water features like lakes, fountains, gushers etc.

2.75.3. Restaurants, cafeterias or food stalls.

2.75.4. Aviary.

2.75.5. Tube wells.

2.75.6. Public toilets.

2.75.7. Lawn / Green land.

2.75.8. Play land.

2.75.9. Any other outdoor / covered recreational facility.

2.76 "Parapet": A dwarf wall whether plain, perforated or panelled along the edge of a roof, balcony, veranda or terrace.

2.77 "Pergola": An outdoor structure consisting of columns that support a roofing grid of beams and rafters. The roofing grids may be left open or covered to create an area sheltered from the elements. Pergolas may be freestanding or attached to a house.

2.78 "Playground": An area used for outdoor play or recreation, especially by children, and often containing recreational equipment such as slides and swings.

2.78.1. All open spaces designated for indoor or outdoor sports activities of all types

2.78.2. All structures serving sports activities like sports complex, gymnasiums, swimming pools, stadium, racecourse, golf course and, sports club of all kinds.

2.79 "Plinth": The height of the finished floor level of the ground floor, measured from the top of the finished surface of the road serving the plot, taken from the centre of the property line of the plot along the road. In case of more than one road serving the plot, the plinth will be measured from the road providing principal access. The height of the plinth will be limited as mentioned in specific Residential/Commercial category, except on plots where the natural contours are more than specified plinth over at least 40 % of the plot area as measured from the point at the centre of the property line of the road adjacent to it, the plinth level will be determined as per the site conditions.

2.80 "Plot Title": Title of the plot will be considered with reference to the road mentioned in the allotment/transfer letter.

2.81 "Proof Engineer": An engineer registered with the Pakistan Engineering Council (PEC) as Consulting Engineer (Structural Design) and with minimum of 10 years' experience of structural design of building works.

2.82 "Property Line": The Plot boundary, which separates a private property from public property or a private property from another private property.

2.83 "Public Building": Building designated for public use such as dispensary, post office, police station, town hall, library or recreational buildings, etc.

2.84 "Registered Architect/ Architectural Firm": A person or a firm registered with Pakistan Council of Architects and Town Planners (PCATP)

as an Architect or as an Architectural Firm with minimum 5 years' experience and is on the approved panel of PDOHA/ CBC.

2.85 "Registered Proof Engineer": A Professional Engineer duly licensed by The Pakistan Engineering Council (PEC) as Consulting Engineer (Structural Design) and with minimum of 10 years' experience of structural design of building works and whose name is listed on the panel of proof engineers maintained by PDOHA/ CBC.

2.86 "Registered Geo-Technology Consultant": A Professional Engineer or a firm duly Licensed by P.E.C. (Pakistan Engineering Council) with minimum 5 years' experience as Geo-Tech Engineer and is on the approved panel of geo-tech consultants maintained by the PDOHA/ CBC.

2.87 "Registered Structural Engineer": A Professional Engineer or a firm duly licensed by the P.E.C. (Pakistan Engineering Council) with minimum 5 years' experience as Structural engineers and is on the approved panel of PDOHA/ CBC.

2.88 "Registered Town Planner": A qualified person or a firm duly registered with Pakistan Council of Architects and Town Planners (PCATP) as an Architect/ Architectural Firm with minimum 5 years' experience as Town Planner and is on the approved panel of PDOHA/ CBC.

2.89 "Renewable Energy": It is generally defined as energy that is collected from resources, which are naturally replenished, on a human timescale, such as sunlight, wind, waves, and geothermal energy etc.

2.90 "Repair or Renovation": Repair work to services, painting, whitewashing, plastering, flooring, paving, replacement of roof of corrugated sheets or of T-iron or girders or wooden roof without change in the cubical capacity or structure approved by the PDOHA.

2.91 "Residential Building": A building or part thereof designed, adopted or used for human habitation.

2.92 "Residential Zone": A zone earmarked for buildings exclusively designed for human habitation and in no case will include its use in whole or a part thereof for any other purpose e.g. shops, clinics, offices, schools, workshops, store or godowns or any other commercial activity.

2.93 "Revised or Amended Plan": Previously approved drawings or plans re-submitted for approval with amendments in accordance with the provision of these Regulations.

2.94 "Roof Top of Commercial Building": Roof of highest or top most floor of the commercial building, to house the common facilities like overhead water tank, stair tower, solar energy system, lift etc. and is shared by all inmates of the building.

2.95 "Scrutiny Fee": A fee to be determined and levied in pursuance of provisions of these Regulations by PDOHA.

2.96 "Septic Tank": A tank in which sewage is collected and decomposed, before its discharge into the public sewer or soakage pit.

2.97 "Shop": It includes any room or part of a building used, completely or mainly, for the purpose of trade or business but will not be used for any activity as may cause noise and nuisance in the neighbourhood.

2.98 "Site Engineer": A qualified engineer engaged to supervise building operations at the site and registered with the Pakistan Engineering Council (PEC) as registered or professional engineer.

2.99 "Soakage Pit": A pit filled with aggregate, boulders or broken bricks and intended for the reception of wastewater or effluent discharged from a septic tank.

2.100 "Solar Reflectance Index (SRI)": It is a measure of the solar reflectance and emissivity of materials that can be used as an indicator of how hot they are likely to become when solar radiation is incident on their surface.

2.101 "Special Projects": Land allotted/ sold/ allocated for a special purpose under an agreement duly approved by the Competent Authority or Executive Board of PDOHA, falls in the category of special projects.

2.102 "Stores/ Godowns": Building(s) meant for storage of material or finished goods at the basement and upper floors, provided these goods are not of inflammable or of objectionable character.

2.103 "Structural Changes": Any change in the structure of a building i.e. supporting members of a building such as load bearing walls, columns, beams, slabs etc.

2.104 "Sub-Division": The division of plot or land held under the same ownership into two or more plots.

2.105 "Sub-Division Plan": A layout plan depicting proposed sub-division duly approved by the PDOHA as provided in these Regulations.

2.106 "Sunshade": An un-habitable outside projection from a building at lintel level to provide protection from weather.

2.107 "Sustainability": Sustainable development is a process for meeting human development goal while sustaining the ability of natural systems to continue to provide the natural resources and ecosystem services upon which the economy and society depends.

2.108 "Sustainable Elements": A plan for an area providing short terms and long term policy guidelines for a systematic and controlled growth for Business & Commercial activities including the façade and architectural elevations of the buildings.

2.109 "Temporary Structure": A structure constructed on temporary basis, within the plot with the approval of PDOHA for a specific period, which will be demolished within approved period, i.e. Temporary structure includes precast slabs, CGI sheets, wooden and any other temporary material.

2.110 "Thermal Bridge": An object (frequently a building) which has a significantly higher heat transfer than the surrounding materials resulting in an overall reduction in thermal insulation of the object or building.

2.111 "Thermal Insulation": It is the reduction of heat transfer (the transfer of thermal energy between objects of differing temperature) between objects in thermal contact or in range of radioactive influence.

2.112 "Thermal Transmittance": It is the rate of transfer of heat (in watts) through one square metre of a structure divided by the difference in temperature across the structure.

2.113 "Title of Plot": Title of the plot will be considered with reference to the road/ street mentioned in the allotment/transfer letter.

2.114 "Toilet": A fixture that consists usually of a water-flushed bowl and seat and is used for defecation and urination.

2.115 "Total Floor Area": The-sum of the floor areas of all the floors of all the buildings on a plot, less exemption as permitted in these Regulations.

2.116 "Town Planner": A person or a firm currently registered as such with the Pakistan Council of Architects and Town Planners (PCATP).

2.117 "TP&BC Dte": Town Planning & Building Control Directorate of PDOHA

2.118 "Urban Heat Island (UHI)": A city or metropolitan area is significantly warmer than its surrounding rural areas due to human activities.

2.119 "Ware House": A building in which goods are stored.

2.120 "Zone": The area earmarked for a particular purpose.

Chapter III General Regulations

3.1 The following Regulations will apply to all types of plots, buildings and land usage: -

3.2 Residential Plots: Residential plot will not be utilized for any other purpose.

3.3 Levelling of Plots: The plot owner will be responsible for levelling in case of any ditch, shrubs, debris, unevenness or abnormality in the plot.

3.4 Amalgamation of Plots: Amalgamation of residential/ commercial plots will be allowed maximum up to four times the size of the original plot (any change will be subject to approval by the Competent Authority), if the allotment conditions of the plots are similar.

3.4.1 COS will be applicable as per new size after amalgamation.

3.4.2 Amalgamation of constructed plots is allowed by removing central wall(s).

3.4.3 Prescribed fee of amalgamation will be charged.

3.4.4 Amalgamation of amenity plots will be considered on case-to-case basis by PDOHA.

3.5 Bifurcation of Plots Bifurcation/ Sub division is allowed for residential plots as under: -

3.5.1 Ph-VIII – Plots of 2000 sq. yd. category or more (1000 sq. yd. each). However, reasonable tolerance in dimensions will be considered on case-to-case basis.

3.5.2 Ph-IV - Plots of 600 sq. yd. category or more (300 sq. yd. approx. each)

3.5.3 Remaining Phases - Plots of 1000 sq. yd. category or more (500 sq. yd. approx. each). Plots having area 1000 sq. yd. with 90'-0" width approx. or greater will be permitted for division. However, tolerance of 1-2% difference in dimension will be considered on case-to-case basis.

3.5.4 Sub division will be done on title, however, depending on the geometry of plot and status/ volume of traffic on other road, corner plot can be considered for sub division on other road/ street, on case-to-case basis.

3.6 Annexation of Adjacent Extra/ Trapped Land: In case where extra land is available, adjacent to the plot, it may be purchased by the member. Rates and permission of such cases is subject to approval by PDOHA.

3.7 Chamfering for Corner Plots: Boundary wall of corner plots abutting on two roads/ streets will be chamfered as under: -

3.7.1 Residential Plots

3.7.1.1 Junctions of roads 60'-0" wide and above: 10'-0" x 10'-0"

3.7.1.2 All other junctions: 6'-0" x 6'-0"

3.7.2 Commercial Plots

3.7.2.1 Junctions of roads 30'-0" wide and above: 6'-0" x 6'-0"

3.7.2.2 All other junctions: 4'-0" x 4'-0"

3.7.3 In case where radius is given at the corner of the plot, the same will be followed as per issued site plan.

3.7.4 In case of plot abutting on roads of two different widths, the required chamfer on both sides will be governed by width of the smaller road

3.7.5 The length of Chamfered portion will be in accordance with width of the respective roads and will be measured along the length of the road.

3.8 Site Plan: PDOHA will provide the Site Plan to the members, Indicating following: -

3.8.1 Size of the Plot

3.8.2 The direction of North.

3.8.3 The Dimensions/ boundaries of the Plot.

3.8.4 Location of gate(s) on residential plots.

3.8.5 The names and width of all street(s)/ road(s) on which the Plot abuts, together with numbers of adjoining houses or premises.

3.9 No structure or activity will fall outside the property line. Any sort of encroachment outside the property line is strictly prohibited.

3.10 Pitching of guard's tents/ cabins outside the property line on PDOHA land or using the open plot for guard living is strictly prohibited.

3.11 Where the park is planned in the rear or on the side of the allotted plot, owner is not allowed to provide any opening in the building towards it, even a pedestrian way in the park, being a public property.

3.12 Removal of division wall between two plots is allowed provided both the plots have same ownership or close blood relations.

3.13 Members to ensure clean environment in front/ around the property.

3.14 Damages: Damages to roads and utility services is strictly prohibited. In case of extension of services if any damage is likely to be caused to road, sewer line, rain water line etc. and such work will not be undertaken without prior approval of PDOHA. In case of damages, PDOHA will impose penalties and cost of repair work will be recovered from member.

3.15 Structures on Roof: Following structures of permanent nature may be constructed on roofs provided they are designed and built to the satisfaction of the Authority: -

3.15.1 Air conditioning and other ducts, vents and wind catchers.

3.15.2 Water tank.

3.15.3 Parapet wall or railing is mandatory in case of accessible roof.

3.15.4 Stair tower/ mumty (applicable as per related Regulations).

3.15.5 Lift machine rooms, Sky light, etc.

3.15.6 Platform for Generator.

3.15.7 Installation of Solar Energy System is allowed (net metering is recommended), not exceeding the height of stair tower ensuring proper design for structure stability.

3.15.8 Wind Energy System with proper engineering design for structural stability.

3.15.9 Access of Lift is allowed on rooftop.

3.15.10 Living room, servant quarter and bathrooms etc. are not allowed inside stair tower.

3.15.11 No mobile phone antennas are allowed on roof of residential building. However, it may be allowed for commercial building subject to approval of PDOHA.

3.15.12 Roofs may be provided with water proofing treatment along with insulation material for thermal efficiency of the building.

3.16 Green Roof: Green Roof will be allowed with any or combination of following: -

3.16.1 Roof when to be converted/ constructed as a Green Roof (Extensive or Intensive), may be provided with: -

3.16.1.1 Water Proofing Membrane (including Root Barrier).

3.16.1.2 Moisture Retention Membrane/ Mat

3.16.1.3 Drainage Membrane/ Layer

3.16.1.4 Filter System

3.16.1.5 Growing Medium (preferably Engineered Soil)

3.16.1.6 Gazebo not exceeding 100 sft on plots measuring 701 sq yds and above.

3.16.2 All type of Green Roofs may be designed and executed up to the height of parapet wall. The landscape/ garden feature may include BBQ counter, fountain, reflection pond, etc., and vegetation up to the stair tower.

3.17 Termite Proofing: Owner will ensure quality termite-proofing treatment prior to RCC works of building foundation before commencement of construction work.

3.18 Blasting: Use of explosive material for construction & demolition work is not allowed in PDOHA.

3.19 Inflammable Material: Storage of inflammable material is strictly prohibited in PDOHA except where allowed by the respective government agencies/ departments and PDOHA.

3.20 Disputes: No owner is allowed to stop the construction activity of other members. Any dispute/ interpretation of Regulations will be referred to PDOHA.

3.21 Structural design and vetting is compulsory for all types of Commercial and Amenity Buildings irrespective of height

3.22 For all residential plots 701 sq yd and above and all commercial plots, the contractor must be registered with PEC/ PCATP and approved by CBC. On site execution of construction work will be supervised by a PEC's registered engineer, from contractors side.

3.23 Besides the undertaking of the Architect the contractor will be responsible for execution of work as per the approved drawings from PDOHA/ CBC duly submitted by Registered Architect/ Structure engineer. In case there is any modification required in the approved plan, the owner will be responsible for submitting the drawings through registered Architect/ Structure Engineer to PDOHA prior to execution on site.

3.24 For each project, contractor will be responsible to provide a board on site during the currency of the project, with following information

3.24.1 Plot Address

3.24.2 Name of the Architect & Structural Engineer with telephone number

3.24.3 Name of the contractor with telephone number

3.24.4 Approved drawing from CBC / PDOHA

Chapter IV Residential Building Standards

4.1 Residential Buildings Standards: Residential buildings will comply with the following standards: -

Table 1: Residential Building Area Standards

Plot Area (Sq. yd.)	Allowable Covered Area	COS			Floor	Remarks
		Front	Rear	Sides		
Up to 200	90%		-		B+G+1	
201 to 400	75%	5'-0"	3'-0"	5'-0" (right only)	B+G+1	
401 to 700	65%	10'-0"	5'-0"	5'-0"	B+G+1	Front COS for rear sub divided plots is 5'-0".
701 & above	50%	20'-0"	10'-0"	10'-0"	B+G+1	Side COS for plots 950-1000 with frontage 64'-0" or less is 7'-6"

Note: In case of allotment of extra land, resulting in switch over to next category, tolerance of 3% will be given to remain in original/ mother category.

Table 2: Minimum Residential Buildings Cubical Capacity Standards

Description	Area (Sq. ft.)	Width	Clear Height
Living room	100	9'-0"	9'-6"
Kitchen	50	6'-0"	9'-6"
Bathroom	24	4'-6"	7'-6"
WC only	15	3'-0"	7'-6"
Servant room/quarter	80	8'-0"	9'-6"
Guard room(s) at the gate only	36	6'-0"	8'-0"
Passages, Corridors Galleries etc.	-	3'- 6"	7'-6"
Main stair case	-	3'-6"	7'-0"

Note: Plots 401 sq. yd. and above may construct toilet (max 18 sq. ft.) consisting of 1 WC and 1 washbasin adjacent to guard room having a separate entrance.

Table 3: Residential Buildings Height Standards

Description	Maximum	Minimum
Level of main gate from crown of road (being opened on the main street/road)	2'-6"	1'-0"
Plinth Level (subject to contour of plot as defined in these regulations)	4'-6"	2'-0"
Ground Floor (Internal)	15'-0"	9'-6"
1 st Floor (Internal)	15'-0"	9'-6"
Main building (up to roof top)	32'-0"	22'-0"
Stair Tower/ Water Tank (with slab)	10'-0"	7'-6"
Stair Tower with elevator shaft and/or with water tank built over it	13'-0"	-
Over all height of building including stair tower with elevator shaft and/or water tank	45'-0"	30'-0"
Parapet Wall for accessible roof (heights to be taken from finished floor level)	5'-0"	4'-0"
Height of main building including parapet wall from crown of the road	37'-0"	26'-0"
Boundary wall from crown of the road (Additional 2'-0" high iron protective barrier permitted)	10'-0"	8'-0"
Basement	-	8'-0"
Guardroom	10'-0"	8'-0"

4.2 Compulsory Open Space (COS) Minimum part of a plot, which is to be left completely and compulsorily open to sky under the Regulations, over which no structure or any integral part of the building will be permitted. COS will always be free from any erection or obstruction except following:

4.2.1 Boundary walls

4.2.2 Steps leading to ground floor.

4.2.3 Light well/ stairs/ ramp leading into basement in side/ rear COS commonly provided as “Open to Sky” may be constructed as under:

4.2.3.1 Corner plots where COS is not applicable are allowed to construct light well/ stair/ ramp on roadside only within allowable area.

4.2.3.2 Plots with minimum 5'-0" COS: Light well may be provided in COS ensuring clear distance of minimum 3'-0" from boundary wall for connectivity of COS.

4.2.3.3 Plots with minimum 10'-0" COS: maximum 50% of COS width may be utilized for light well.

4.2.3.4 A temporary shade (3 sides open) may be constructed over the open well to stop the rainwater.

4.2.3.5 In cases of plots where level difference is such that basement could be designed as lower ground floor, special permission will be granted by PDOHA for lowering the full COS of back and sides with proper design of services/ drainage.

4.2.4 Two/ Three columns for gate in line with boundary wall and not exceeding the height of boundary wall.

4.2.5 Guardroom with max size of 65 sq. ft. in front COS.

4.2.6 Underground water tank in front COS.

4.2.7 Dog / Bird cage in front or rear COS.

4.2.8 Pond, Fountains, Elevated flowerbed and rockery in front/ road side COS only.

4.2.9 Cabinet for electrical utilities including motor cabinet in any COS. Covering of these having architectural element.

4.2.10 Geysers, water filters, water taps and washing/ ablution area in rear or side COS.

4.2.11 Covering of service pipes with architectural elements. Provided that they be within the permissible COS.

4.2.12 Wooden/ metallic service stair (open) in the rear COS.

4.2.13 Benches, BBQ Counter, walk ways, RO Plant in any COS leaving half the width of permitted COS.

4.2.14 Gazebo is allowed in front COS.

4.2.15 Slab projection over main gate is allowed up to 5'-0" within property line.

4.2.16 Grill gate/ railing for pets up to 6'-0" height.

4.2.17 Maximum projection of sunshades toward streets and in COS will not exceed 2'-0" width at lintel level.

4.2.18 Car porch will not extend to the side COS. However, Pergola is allowed over side COS connecting car porch slab to one/ two columns in line of the boundary wall through one/ two beams. Pergola may also be covered with any temporary material i.e. Glass, Fibreglass, etc. In case of terrace/ balcony over car porch slab, 4'-0" high parapet wall will be provided separating pergola from main building line

4.2.19 3'-0" wide bay window or open balcony with sun shade having maximum length 20'-0" is permitted towards roadside and in front COS. The area of bay window/ open balcony will not be included in the overall covered area.

4.2.20 For odd or irregular shaped plots, the requirement of footprint area will prevail over COS. However, COS in front will be maintained as per provision of these Regulations.

4.2.21 COS on non-rectangular shaped plots will be measured as average space between buildings and property line. At least 50% permissible COS will be ensured.

4.2.22 Servant quarters (including toilet) will not be allowed in COS. All servant quarters will be part of the main building.

4.3 5'-0" cantilever extension of car porch beyond building line is allowed in front COS (minimum 10'-0") without any structure over it for plot category 401 sq. yds. and above. Same space may have an elegant grill up to 3'-6" and may be utilized as sitting area.

4.4 Car porch/ Garage will be provided for plot size 401 sq. yd. and above with a minimum size of 10'-0" x 14'-0".

4.5 High car porch is not allowed with columns resting over the boundary wall. They can however be permitted if kept clear of the COS.

- 4.6** Stairs/steps outside the boundary wall will be prohibited except ramp and steps of wicket gate up to 4'-0" (from property line towards the road).
- 4.7** Erection of hoardings and antenna towers on residential buildings is strictly prohibited.
- 4.8** Swimming pool is permitted to be built on plots of 500 sq. yd. or above after fulfilling following conditions: -
- 4.8.1** In basement, ground or first floor ensuring sound structural design duly certified and documented by registered structural engineer.
- 4.8.2** To be appropriately protected for privacy.
- 4.8.3** Not to be constructed in COS except in front and Rear COS by taking approval from PDOHA on case to case basis and keeping minimum 5'-0" away from the boundary wall
- 4.8.4** Change/shower room is mandatory.
- 4.8.5** Proper filtration plant will be installed.
- 4.8.6** Holding tank of appropriate capacity to be provided.
- 4.8.7** Any damage caused to neighbouring structure will be made good by owner constructing swimming pool.
- 4.8.8** Arrangements for disposal of swimming pool water will be ensured.
- 4.9** Placement of generators and electro-mechanical equipment is allowed in road side COS or on the roof top with proper structural arrangements as required subject to sound structural design duly verified/certified and documented by registered structural engineer, provided the following is satisfied: -
- 4.9.1** Controlled smoke and noise.
- 4.9.2** Sound resistance canopy.
- 4.9.3** Anti-vibration pads should be provided under Generator.
- 4.9.4** Should have proper electro-mechanical equipment connections of permanent nature.
- 4.9.5** Covering of the Generator having architectural element not exceeding boundary wall height and protruding maximum one foot on sides of Generator, will be allowed.
- 4.10** A water channel of cross-section 6" x 6" will be constructed in line with boundary wall under the gate. This will have suitable covering on top

(grating) to ensure that water from inside the house does not come on the road. This drain will be suitably connected to the manhole.

4.11 Maximum allowable width of flowerbed outside residential plot is 2'-0" adjacent to wall. Plantation of trees/ shrubs is also permitted within the area of flowerbed. Rest of the area beyond flowerbed up to edge of the road will either be covered with grass or paved at the level of kerb block.

4.12 Shops, offices and godowns of any description for storing or exhibiting for sale, any merchandise of any type or any commercial/industrial use, are prohibited in residential buildings/ plots.

4.13 Residential Buildings will not be used as regular place of assembly / worship including Masjid, Jamaat Khana, Imam Bargah, Azza Khana, Church, Temple, marriage or other social ceremonies and concerts etc.

4.14 Commercial activities including establishing offices, parlours, tuition centre, hostel, guesthouse etc., are prohibited in residential buildings.

4.15 Inter floor in residential units may be permitted on top of bathroom/dress/ store provided the clear height does not exceed 5'-0".

4.16 The parameters for level variations while scrutinizing and evaluating submission plans are as under: -

4.16.1 Plots wherein provision of two main gates is allowed in Regulations; if the variation in the plot levels between minimum and maximum exceeds 5'-0", then, any one gate may be planned against minimum level. If, however, level variation is less than 5'-0", both the gates would be placed according to the road in front.

4.16.2 Due to variation in level or encountering hard strata, wherein excavation becomes difficult, split-level plinth may be planned duly supported by the contour plan.

4.16.3 If the contour of a plot depicts level variation of 5'-0" and above, encompassing up to 40% of the plot area and plot falls on more than one road/street, the bottom of the basement or part thereof, may be planned with respect to one of the road, having direct access to it from the abutting road provided it does not fall on the main road.

4.17 Owner of the plot (401 Sq. yd. and above) will make an arrangement by constructing an underground tank for collection of grey water, which can be used for lawn, plants and flowerbeds etc.

4.18 The height of area between edge of the road and property line for any building will not be raised. Blocking of such area by placing stones / blocks is not permitted.

4.19 Construction of “Duplex” of any design is strictly prohibited on any size/type of plot.

4.20 Construction of more than one unit on large size plots (1000 sq. yd. & above) may be considered under these parameters: -

4.20.1 Allowable covered area to be equally distributed on all units. Total covered area of all units would remain equal.

4.20.2 Intermediate space between two units will be at least 7’-0” for the purpose of light and ventilation.

4.21 Solar energy system will not exceed the overall height of the building.

4.22 No structure of any kind will be allowed on roof except Stair Case/ Mumty, Over Head Water Tank, Solar Energy System and Solar Water Heaters, Green Roof and allied landscape elements.

4.23 A cabinet of 3’-0” width (maximum) is allowed to store batteries etc. adjacent to any one side of the stair tower.

4.24 A powder room having maximum area of 24 sq. ft. can be constructed within the allowable area of stair tower.

Table 4: Maximum Allowable Area of Stair Tower

Type (Sq. ft.)	Plot Size (Sq. yd.)	
	Up to 700	701 and above
Box	275	325
Dogleg	230	250
Straight Flight	200	225
Spiral	150	200

4.25 For residential buildings, the maximum riser of stair/ steps will be 7” and the minimum tread will be 10”.

4.26 In case main spiral staircase of minimum 3’-6” width continues until roof, the area of stair tower will be governed as per area for Box Stair.

4.27 The stair tower will be strictly restricted to the periphery of stairs and in no case be utilized for any kind of living purpose.

4.28 Barsati towards opening of the stair tower with maximum projection of 6’-0” with three sides open is permitted. The area of barsati will be exempted from the area of stair tower.

4.29 Permission of overhead water tank over stair tower/ mumty above 42’-0” will only be allowed if the owner submits arrangements of solar water heater. The design should ensure function and aesthetics.

4.30 Open spiral stair of 5’-0” diameter (minimum) or straight stair of 2’-6” width (minimum) is allowed in rear COS for access to servant room at first floor and/ or roof top, leaving clear 3’-0” from boundary wall for plots measuring 401 sq. yd. and above.

4.31 Basement for Residential Plots: Basement will be permitted up to allowable footprint of ground floor while ensuring safety of adjoining buildings. Any damage occurring to neighbouring property or the PDOHA property will be made good by the owner/ builder to the satisfaction of the PDOHA. Indemnity Bond will be obtained from owner before issuing approval of building plan. Basement can be used for parking.

4.31.1 Kitchen, toilet and bathroom in the basement with electro-mechanical means for disposal of waste and exhaust are permitted for plots where COS/ light well is applicable. In the absence of COS/ light well, only toilet and bathroom are permitted ensuring electro-mechanical means of waste disposal. Sump pit will be properly designed and water proofed to avoid any leakage/ seepage in basement.

4.31.2 Basement walls adjacent to already constructed houses should be completed within 45-60 days from the date of commencement of excavation.

4.31.3 The retaining walls of the open/closed basement should be of RCC.

4.32 Entry Gates: Main gate(s) for the entrance of the bungalow will be located either at left or right corner of the front wall of the house as per approved site plan.

4.32.1 Gate in the centre of the plots measuring 2000 sq. yd. category and above can be given. Second main gate will only be allowed on the other road(s), provided it is a corner plot. However, additional wicket gate can be given on left or right side of plot.

4.32.2 Standard width of main gate including wicket gate excluding pillars should not be more than 20'-0". However, if member desires to increase the width, gate up to 25'-0" may be allowed by paying additional charges.

4.32.3 Two gates are allowed for plots falling on more than one road (corner plot) provided the adjoining road is not high volume traffic carrying road/ khayaban. The additional gate including wicket gate will be as under:

4.32.3.1 299 sq. yd. & below 4'-6" wicket gate only

4.32.3.2 300 sq. yd. & above Up to 12'-0" width

4.32.3.3 500 sq. yd. & above Up to 15'-0" width

4.32.3.4 1000 sq. yd. & above Up to 20'-0" width

4.32.4 Two gates on title road or one at each road is allowed for plot sizes 1000 sq. yd. and above category. Main gate at or near chamfer is not allowed.

4.32.5 Two gates with car porches and independent guard rooms will be permitted only for plots measuring 1000 sq. yd. category and above (falling on one road) having minimum front width of 75'-0" or greater.

4.32.6 Arch / design element over the gate is permitted. However, the height will not exceed 12'-0" from road level with width of 5'-0". In no case, the element over gate will exceed beyond property line.

4.33 Ramp: Drive way to have 4 independent conduits having minimum 6" diameter for services like telephone, gas, water supply etc. This should be indicated in the plan of the house. The slope of ramp should be as under:

4.33.1 Where no footpath exists, the ramp may be extended maximum up to the outer edge of kerb. The height of ramp at start of property line should be maximum 2'-0". The height of ramp will be taken from intersection of gate centre line & reference road crown.

4.33.2 Where footpath exists, the ramp start point will be taken from the intersection of the gate to the inner edge of footpath. The height of ramp should not exceed more than 2'-0".

4.34 CCTV cameras may be installed in both inner and outer periphery of the building without compromising privacy of the neighbours. PTZ cameras are not allowed. Only fixed cameras are permitted.

4.35 Each house of 401 sq. yd. and above is required to plant minimum 1 tree within property line, before completion of the house. In case more than one tree is planted and is visible above the height of boundary wall, owner will get a 25% rebate in completion fees.

Chapter V Commercial Building Standards

5.1 Commercial Buildings Standards: All commercial buildings will comply with the following area standards: -

Table 5: Commercial Building Area Standards

Plot Size (Sq. Yd.)	Allowable Covered Area	Arcade	COS		FAR	Floor
			Rear	Sides		
Up to 250	100%	-	40 sq. ft. compulsory ventilation duct OR Refer to clause No.5.6		-	B+G+4
251 to 400	90%	-	7'-6"	-	-	B+G+4
401 to 600	GF 85% Above GF 75%	-	7'-6"	5'-0" one side	1:5	As per FAR
601 to 999	GF 80% Above GF 70%	8'-0"	8'-0"	5'-0"	1:5	
1000 to 1999	GF 75% Above GF 65%	8'-0"	10'-0"	7'-6"	1:5.5	
2000 and above	GF 70% Above GF 65%	8'-0"	10'-0"	10'-0"	1:5.5	

Table 6: Commercial Building Height Standards

Description		Maximum	Minimum
Plinth		5'-0"	2'-0"
Ground floor (Internal)		16'-0"	9'-6"
1 st Floor and subsequent floors (Internal)		12'-0"	9'-6"
Parapet Wall		4'-0"	3'-6"
Height of Main Building (applicable to standard size plots)	B+G+4	69'-0"	56'-6"
	B+G+5	82'-0"	66'-6"
Stair tower/ Water Tank above top floor without lift shaft (Internal)		10'-0"	7'-6"
Stair tower above top floor with lift shaft		15'-0"	10'-0"
Over All Height applicable to standard size or amalgamated plots	Without Lift well/ shaft	B+G+4	79'-0"
		B+G+5	92'-0"
	With Lift well/ shaft	B+G+4	84'-0"
		B+G+5	97'-0"
Arcade		14'-0"	8'-6"
Arcade level from crown of road		1'-6"	1'-0"
Ceiling height of basement without obstruction		10'-0"	8'-0"
Clear Height of basement for parking from floor top to bottom of beam etc.		8'-6"	7'-6"

Table 7 : Commercial Building Height Standards on FAR

Description	Height	
	Maximum	Minimum
Plinth	-	2'-0"
Ground floor	22'-0"	9'-6"
1 st Floor and subsequent floors	18'-0"	9'-6"
Parapet Wall	5'-0"	4'-0"
Stair tower/ Water tank above top floor without lift well/ shaft	10'-0"	7'-6"
Stair tower above top floor with lift well/ shaft	15'-0"	12'-0"
Arcade	-	8'-6"
Arcade from crown of road	1'-6"	1'-0"
Ceiling of basement without obstruction	-	9'-0"
Basement for parking without obstruction	-	7'-6"

5.2 General Condition: The commercial building over a commercial plot may house following: -

5.2.1 Entire building designed and duly approved for commercial activity. Commercial cum residential units with following configuration, if designed as such, will have: -

5.2.1.1 Ground + Mezzanine + Authorised Floors: Ground and mezzanine (if constructed) will be restricted to commercial activity with independent entry and remaining floors will be residential apartments with separate entry.

5.2.1.2 Ground + Authorised Floors: Ground and first floors will be designated for commercial activity and rest of the floors may be entirely commercial or entirely residential. If residential units are constructed above first floor, then they will be given independent entry/stair for the residents.

5.2.2 Each building will have separate entry at ground level for upper floors from road/street.

5.2.3 Roof top will be used for services and cannot be sold out. The building committee may install security gate at the entrance of the roof, after obtaining NOC from all residents of the building.

5.2.4 Access ramps and stairs / steps to the basement or ground floor should not fall outside property line.

5.2.5 Entrance at Chamfer will be allowed in commercial buildings. However, the steps in this entrance will remain within the property line that would have existed in case the chamfer was not there. In no case will these steps be allowed to hinder the footpaths.

5.2.6 Minimum floor area of a shop on ground floor will be 100 Sq ft and a minimum width of 8'-0".

5.3 Stairs: The riser of stair in commercial building should not be more than 7" and the tread should not be less than 10". Minimum width of each stair flight will be 3'-6".

5.3.1 Handrails should be provided on both sides of the stairs.

5.3.2 Winders are strictly prohibited.

5.3.3 Stairs will be provided with one landing after maximum of 15 risers.

5.3.4 At least one emergency stair case in addition to main stair case is required to be provided in for plots sizes of 400 sq yd and above. However, plots larger than 600 sq yd stair cases will be provided as required in Building Code of Pakistan – Fire Safety Provisions – 2016.

5.3.5 Common spaces would be utilized for the defined purpose only. Utilization of the same including area under the stairs for commercial/storage is not allowed.

5.3.6 Provision of lift is compulsory as per design requirement for climbing height of 46'-0". Additional lift required for climbing height above 59'-0".

5.4 Maximum projection of Sunshades over streets and in COS beyond 16'-0" height be permitted only at lintel level, not exceeding 2'-0" in width. In no case projection be allowed at sill or roof level. Projections will be kept clear of any element such as AC outer units, flower pots etc.

5.5 3'-0" wide projections are permitted starting from first floor upward with 16'-0" clear height from road level. Front/ side projections falling on the main roads and streets (having width of 20'-0" or more) may be utilized as habitable areas. Rear/ side projections falling on roads/ streets (having width 15'-0" or more) will stay in the form of balconies and can also house the landing of stairs, at a vertical height of 16'-0" from the adjacent road.

5.6 A compulsory ventilation duct, 40 sq ft, from first floor upward would be provided if facilities like kitchen and bathroom except storeroom are located in inner part of the building. If these are located in such a manner that ventilation/ natural light are available, then the provision of duct may be done away with.

5.7 In case of restaurant on ground floor/ basement an exhaust duct will be provided at a height of minimum 12'-0" from the road level.

5.8 40% loft having a maximum clear height of 5'-6" will be allowed for each shop with minimum ceiling heights of 16'-0". The loft may also be constructed over ramp leading to basement ensuring head clearance at ramp minimum 7'-6".

5.9 Corridors or passages will be minimum 5'-0" up to plot area of 499 sq. yd. and minimum 6'-0" for plots area of 500 sq. yd. and above.

5.10 For plots, abutting on public streets at rear, the rear COS will be condoned. In case of corner plot, the COS on side abutting the road will be condoned and arcade will be provided. This is not applicable for plots on Beach Avenue (Abdul Sattar Edhi Avenue) where the entire COS 7'-6" will be provided on front side.

5.11 For plots up to 600 sq. yd. abutting on streets at three sides, the COS on the side not abutting on street will be condoned. No opening of shop or office on side road will be provided.

5.12 Installation of Antenna Tower may be allowed on special permission and by paying prescribed charges. Permission will be granted for one year which may be renewed as per policy.

5.13 Placement of generators, electro-mechanical equipment and solar energy system, as may be required, is allowed on the roof tops subject to fulfilment of specific conditions and sound structural design duly verified / certified and documented by registered structural engineer, provided following are satisfied:-

5.13.1 Controlled smoke.

5.13.2 Noise insulation canopy.

5.13.3 Anti-vibration pads should be provided under Generator.

5.14 Amalgamation of small commercial plots (100, 200 & 300 sq yd) will be permitted to combine into bigger size plots. Construction on amalgamated plots would be permitted as per regulation applicable on original category, including allotment of extra land. Amalgamated plots of area 400 sq yd and above (falling within the standard commercial belt) will be allowed B(s)+G+5 floors construction, dedicating the basement(s) for parking purposes only. Such amalgamated buildings will not be constructed on FAR. In case the basement is not dedicated for parking, the permission will be restricted to B+G+4 floors.

5.15 In case of amalgamated plots measuring 400 sq yd and above, construction of additional stair and stair towers will be permitted. Covered area will be governed as under:-

5.15.1 150 sq ft for stair tower.

5.15.2 100 sq ft for lift.

5.16 Trade license for any commercial activity will be required to be taken from CBC. However, CBC will get NOC from PDOHA in this regard.

5.17 Structure of commercial buildings to have inbuilt safety features against seismic threat, based on the applicable seismic zone parameters e.g. Karachi lies in 2-B seismic zone, as such the building should be safe against an earth quake of 6.5 Richter Scale intensity. An endorsement on the right margin of the submission drawing will be made by the structure engineer duly signed by him.

5.18 Access for handicapped (Universal Accessibility) should be provided in commercial buildings. Plots falling in standard commercial belt up to 200 sq yd and amalgamated plots up to 800 sq yd will provide a temporary ramp/ mechanical arrangements. Buildings designed on FAR will provide permanent ramp for universal/ handicapped accessibility.

5.19 Buildings above G+5 floors will mandatorily use ready mix concrete.

5.20 Erection of hoardings or any kind of advertisement on the front, rear or sides on buildings is allowed after getting permission from CBC. However, CBC will get NOC from PDOHA in this regard.

5.21 Swimming pools are permitted for buildings constructed on FAR after giving following undertaking: -

5.21.1 Proper filtration plant will be installed.

5.21.2 To be properly designed ensuring structural stability.

5.21.3 Not to be constructed in COS.

5.21.4 Any damage caused to neighbouring structure will be made good by owner constructing swimming pool.

5.21.5 Proof of carrying out complete water proofing.

5.21.6 Changing Rooms are provided with swimming pool.

5.21.7 In case pool is located on the roof top, toilet and changing room will be allowed on roof top provided they are within the allowable covered area / FAR and within the height restriction (where applicable).

5.22 Construction of basement(s) will be permitted up to allowable footprint of ground floor ensuring safety of adjoining buildings.

5.23 Driveway ramp from ground floor to basement(s) may be constructed in COS and will be excluded from footprint area. Driveway ramp from ground floor to upper floors will not be constructed in COS. However, it will be excluded from footprint area.

5.24 Construction of more than one basement will be permitted subject to sound structural design and safety of neighbouring building(s) and services/ infrastructure duly verified by registered structural engineer. The owner will make any damage to the adjoining building and services / infrastructure good to the satisfaction of the authority.

5.25 Neighbours Safety: If the entire plot is excavated for the foundation or basement, it is essential for the owner to ensure that adequate safety measures are taken against damage of neighbouring compound walls, foundations etc. If the neighbouring building does not have a basement, a safety distance of 5'-0" is to be ensured while excavating the basement(s). The owner excavating the basement will make any damage occurring due

to excavation good. Work may be stopped by PDOHA if the owner fails to take remedial action.

5.26 Basement space may be utilized for commercial/office use, showrooms; however, its use for residential purpose will be prohibited.

5.27 If basement is used for purposes other than parking, its area will be counted towards floor area.

5.28 Kitchen will be allowed in basement, provided it has proper ventilation/ exhaust system, disposal of waste, drainage arrangement and emergency exit.

5.29 Shops will be allowed in the basement, subject to proper arrangement for natural light and ventilation, fulfilling one of the following:

5.29.1 Access to basement may be from front, rear or side remaining within property line.

5.29.2 Ground floor shops can be interlinked with basement shops through proper stairs within the shop areas.

5.30 A facade policy will be applicable for all buildings as per the PDOHA Regulations. PDOHA will approve the façade & elevation of each building (at the time of submission of plans). Material finishes for facade will be followed as under: -

5.30.1 Material must be robust, maintenance free, environment friendly, sustainable, durable, weather resistant and fire retardant. This may include but not limited to Aluminium Composite Panel (ACP), stone, marble, granite, colour crete, fair faced concrete, tiles, cladding.

5.30.2 All commercial buildings may use double glazed glass system conforming minimum 60% reflective, high performance glass. All double glazed window spacers should be of aluminium.

5.30.3 It is mandatory to use tempered glass to minimize accidents.

5.31 Special Conditions: Commercial buildings will incorporate / install CCTV cameras in both inner and outer periphery of the building

5.31.1 Additional precautionary measures including Gas Alarm System to be taken wherever any Gas Cylinder or relevant facility is provided.

5.32 Exemptions from Floor Area Ratio (FAR)

5.32.1 Parking spaces

5.32.2 Recreational facilities and prayer places up to maximum 5%

5.32.3 Arcades

5.32.4 Ramps and driveways

5.32.5 Escalators/ Lift towers along with landing

5.32.6 Stairs and stair towers along with landing

5.32.7 Open balconies over streets

5.32.8 Passages around voids

5.32.9 Underground/ Overhead water tanks

5.32.10 Electric Sub Stations

5.32.11 Electrical/ Mechanical plant rooms/ solar energy plant room

5.32.12 Service areas including service duct for cabling to the extent of 100 Sq. ft. per floor.

5.32.13 A service floor may be allowed in high-rise buildings (designed as per FAR).

5.33 Pre-requisites Pertaining to High Rise Buildings: - .

5.33.1 Environmental Impact Assessment (EIA)/ Initial Environmental Examination (IEE) with NOC from Sindh Environmental Protection Agency (SEPA) as per type & size of the building along with any other requirement.

5.33.2 Civil Aviation Authority (CAA) - NOC for height

5.33.3 Traffic Impact Study (TIS)

5.33.4 NOC from K Electric

5.33.5 NOC from SSGC

5.33.6 Plots where FAR is applicable, overall all height of the buildings will be such that it does not intersect an imaginary line from the opposite side of the title road serving the building at an angle of 65 Degree with the horizontal (Not applicable on flag mast and communications equipment).

5.33.7 Width of the abutting road will be the dominating factor to determine the maximum height of the building.

5.33.8 Height of the building will not exceed the height limits specified by the Civil Aviation Authority (CAA).

5.34 At least one garbage chute, non corrosive, non stick, smooth finished impervious inner surface; linking all floors in the building will be provided

with a collection room at basement, ground or parking floor level for final disposal. The garbage chute should:

5.34.1 Be vertical for the whole length

5.34.2 Internal diameter should not be less than 2'-0"

5.34.3 The garbage collection room should have a water hose and drainage for washing within it, apart from exhaust fan.

5.35 A service/ mechanical floor may be allowed in high rise buildings (designed as per FAR). The area of this floor will not be counted in covered area and height of the building will not be more than the allowable maximum height.

5.36 A dedicated prayer area will be mandatory in all High Rise Buildings in respect of overall requirement of the building. This will be included in the 5% area exempted from FAR.

5.37 No boundary wall / fence / guard-room / gate will be allowed for any open commercial plot.

5.38 Commercial Buildings will be required to ensure periodic facade cleaning. Buildings, where FAR is applicable, installation of facade cleaning system is mandatory and its design will be included in submission plan & completion plan

5.39 Utilities Requirement for Commercial Buildings

5.39.1 Air-Conditioning: Buildings may have air conditioning in such a way that external units do not create hindrance for pedestrians with following considerations:-

5.39.1.1 All outer AC units will be fixed on roof of the building or on the open wall(s) of the shop/ arcade on ground floor at a depth of maximum 4'-0" below allowable projection and maximum 3'-0" below roof slab at first and subsequent floors. Decorative elements/ louver may be used in order to cover/ hide the AC outer units.

5.39.1.2 For air conditioning, green gases may be used i.e. Chlorofluorocarbon (CFC) Free Refrigerant, in HVAC&R Systems for domestic and commercial use. In addition, those Refrigerants are allowed that have an Ozone Depletion Potential (ODP) of zero and a Global Warming Potential (GWP) less than 50.

5.39.2 Elevators: All buildings of 401 Sq. yd. and above governed by FAR to have an independent Service Elevator besides the Passenger Elevators.

5.39.2.1 Minimum size of elevator cabin will be 6'-0" x 6'-0" with 4'-0" wide opening.

5.39.2.2 All elevators / lifts should be equipped with emergency light, emergency call button / phone, safety brakes and door safety sensors for emergencies like power failure, fire and earthquake.

5.39.2.3 All elevators / lifts should have in-built emergency landing devices, so that upon power failure, a car automatically moves to the nearest floor using a rechargeable battery to ensure that the lift door opens to facilitate safe evacuation of passengers.

5.39.2.4 In case of an earthquake, seismic sensors installed in elevator should detect the earthquake; move the elevator car to nearest floor, and open doors for safe evacuation of passengers.

5.39.2.5 Elevators should be Handicapped Accessibility compliant as per Accessibility Code of Pakistan 2006 along with all requirements in these regulations:

5.39.2.5.1 Elevator hall and car buttons should be mounted at 3'-6" height with call buttons minimum 0.75" in diameter, with illumination levels.

5.39.2.5.2 Braille plates next to buttons and at entrance jambs.

5.39.2.5.3 Two-way communication in elevator cab / car so that Deaf / Blind users can utilize it effectively.

5.39.2.5.4 Chimes / verbal announcements that indicate floor passing and the next arrival floor.

5.39.2.5.5 A car / cab large enough to accommodate a wheelchair and a 360-degree turn.

5.39.2.5.6 Door protective / re-opening devices that will re-open the door without physical contact.

5.39.2.5.7 Emergency controls that are grouped at the bottom of the elevator control panel and have their centre lines not less than 3'-0" above the finish floor.

5.39.2.6 The number of elevators will be installed as sum of following item A and B.

5.39.2.7 A -total built up area

Table 8 : Elevators

No of Elevators	Area (Sq. Ft)
1	5,000 – 50,000
2	51,000 – 150,000
3	151,000 – 250,000
4	251,000 – 400,000
5	401,000 – 550,000
6	551,000 – 700,000
7	701,000 – 850,000
8	851,000 – 1,000,000
9	1,001,000 – 1,200,000
10	1,201,000 – 1,400,000
11	1,401,000 – 1,600,000
12	1,601,000 – 1,800,000
13	1,801,000 – 2,000,000
14	2,001,000 – 2,200,000
15	2,201,000 – 2,400,000
16	2,401,000 – 2,600,000
17	2,600,000 – 2,800,000

5.39.2.8 B - Additional Elevator to be added for item A above depending on number of floors as under

No of Elevators	No of Floors
1	11 – 30
2	31 – 60
3	61 – 90
4	91 and above

5.40 Utility Policy: Utility spaces/ structures/ machine room (sub-stations, meter rooms, etc.) with proper design allowed in basements or Ground Floor (not counted in FAR) and will not be allowed in COS.

5.40.1 Cooling tower/ Chiller Plants will be allowed on rooftop.

5.40.2 Central back-up Generator for the whole of commercial or high-rise building will be provided & maintained by the owner while also incorporating the same in the MEP plans.

5.40.3 Water Conservation:

5.40.3.1 Use of water efficient fixtures i.e. shower, kitchen sink, taps, laundry machine, toilet flush, faucets etc. with the target of above 50% reduction in water.

5.40.3.2 No plot owner will be allowed to install ground water extraction facilities (including open well, borehole etc.). In any justifiable requirement, prior permission from PDOHA will be obtained

5.40.3.3 Buildings constructed on FAR will construct grey water tank. It will be connected with building through separate plumbing for grey water collection.

5.41 Specific Instructions for Shop Owners:

5.41.1 The owner or occupant (in case of tenant) of shops / public buildings will ensure proper arrangements for disposal of garbage.

5.41.2 Wall chalking and pasting of posters etc. is not allowed.

5.41.3 Arcade/ passage in front of each shop will be kept free of any fixed or movable items to provide clear passage to users.

5.41.4 Showcases, sale goods, seating for customers must not be placed outside in the arcade or passage as the case may be.

5.41.5 No room cooler, fan, water cooler, generator, gas cylinder(s), UPS batteries or charger will be placed outside the shop.

5.41.6 No outer part of the building will be altered, modified or pierced for fixing decorative material or display of goods.

5.41.7 Sign or name boards of only specified sizes will be allowed as per approval of building plan.

5.41.8 Stand-alone boards will not be placed on streets, roads or arcade.

5.42 Maintenance of Buildings: Periodic maintenance by the owner(s)/ occupant(s) is required for all buildings.

5.42.1 The Owners/ Occupants/ Tenants will maintain each commercial building directly or through a proper maintenance company. In case owner has completely sold the sub units, building will be maintained through a committee organized or formed by the owners/occupants.

5.42.2 Owner to submit affidavit at the time of C lease detailing members of the maintenance committee. Maintenance charges will be divided equally among the unit owners/ tenants.

5.42.3 Maintenance of firefighting equipment will be done periodically.

5.42.4 In case the Owners/ Occupants/ Committee fails to carryout necessary maintenance works, PDOHA will issue notice for commencement of works to be completed within the period as specified in the notices from the date of issuance.

5.42.5 On expiry of notice period PDOHA will refer case to CBC to take necessary action in light of Cantonment Act 1924.

Chapter VI Amenity Building Standards

6.1 General Conditions: Amenity plots will neither be converted nor will be utilized for any other purpose than the allotted.

6.1.1 Additional two floors in addition to authorized floors may be permitted considering the general environments, neighbourhood and purpose of the amenity, on payment of prescribed additional development charges.

6.1.2 Building Plans will be approved by DHA (TP&BC Dte).

6.1.3 In case, entire basement is dedicated to parking, 1 x additional floor may be permitted without payment of additional development charges (Excluding Masjid).

6.1.4 In case basement is dedicated for parking including 25% for amenities, entire plot area excluding COS will be permitted. For plots less than 1000 sq. yd., entire plot area including COS may be utilized for parking ensuring safety of neighbouring building.

6.2 Amenity Buildings Height Standards: All amenity buildings will comply with the following height standards: -

Table 9: Height Standards for Amenity Buildings

Description	Height	
	Maximum	Minimum
Level of main entrance (open on main street/road)	2'-6"	1'-0"
Plinth level subject to contour of plot as defined in these Regulations	5'-0"	3'-0"
Ground Floor (internal)	18'-0"	10'-0"
1st Floor and subsequent floors (internal)	18'-0"	10'-0"
Parapet Wall	4'-0"	3'-0"
Height of Main Building excluding parapet wall (G+1)	41'-0"	23'-0"
Height of Main Building excluding parapet wall (G+2)	59'-0"	33'-0"
Height of Main building excluding parapet wall (G+3)	77'-0"	43'-0"
Height of Main building excluding parapet wall (G+4)	95'-0"	53'-0"
Height of Water Tank/ Stair Tower (including slab)	10'-0"	8'-0"
Stair tower with lift machine room and / or with water tank built over it	16'-0"	13'-0"
Boundary wall from crown of the road	10'-0"	6'-0"
Ceiling height of basement	14'-0"	10'-0"
Clear height in basement for parking from floor top to bottom of beam etc.	8'-6"	7'-6"

Note: Floor heights for Petrol pumps can be relaxed on case to case basis.

6.3 Placement of generators, electro-mechanical equipment and solar energy system, as may be required, is allowed on the roof tops subject to fulfilment of specific conditions and sound structural design duly verified / certified and documented by registered structural engineer, provided the following is satisfied: -

6.3.1 Controlled smoke.

6.3.2 Noise insulation canopy.

6.3.3 Anti-vibration pads be provided under Generator.

6.4 Plots having area 4 Acre and above, main entrance from the road should be planned in such a way that queue length of at least 5 vehicles should be within the plot limit to avoid traffic congestion on the main road.

6.5 Integral/dedicated parking arrangements will be ensured within the premises. Parking on the roads and streets is not allowed.

6.6 Facilities like small canteen/tuck shop and medical stores/floral shops etc. if planned, will remain part of the main building.

6.7 Ramp will be made for entrance/exit of handicapped persons as per universal accessibility standards.

6.8 Sub division of amenity plots are not allowed. However, Competent Authority may allow amalgamation under special conditions.

6.9 Standards for Amenity Buildings for Health and Education: -

Amenity plots for education/hospitals will observe the following standards:

Table 10 : Health and Education Amenity Buildings Standards

Type of plot	Plot Size	Allowable Covered Area	COS			No of Floors
			Front	Sides	Rear	
Educational	All	50%	10'-0"	10'-0"	10'-0"	B+G+1
Hospital	Less than 1000	60%	10'-0"	5'-0"	10'-0"	B+G+1
	1000 & above	65%	10'-0"	10'-0"	10'-0"	B+G+1

6.9.1 Following additional conditions will also be applicable to buildings related to Health and Education:

6.9.2 Number of blocks designed in a plot boundary, open space in between two blocks will be minimum 15'-0".

6.11 Standards for Petrol Pumps, C.N.G. and Electric Vehicle (EV)

Stations: Petrol pumps, CNG & EV stations are only allowed in the designated/ planned plots.

6.11.1 The term "Petrol Station" means a station for the sale and retail of petrol and ancillary products for motor vehicles.

6.11.2 The minimum area of a petrol station used for petrol filling facilities and servicing activities will not be less than 1000 sq. yd.

6.11.3 The minimum area of a CNG station will not be less than 600 sq. yd.

6.11.4 Access roadways of Petrol, CNG & EV station will be constructed in accordance with the following requirements: -

6.11.4.1 The width of each lane will be at least 12'-0".

6.11.4.2 "IN" and "OUT" roadways will be provided for entering and leaving the approach traffic lane at an angle of not more than 45 degree.

6.11.5 Adequate space will be provided in petrol stations for parking for supply tankers while discharging its load.

6.11.6 In addition to lavatory provided for the staff, at least one lavatory will be provided, at Petrol, CNG & EV station exclusively for public use.

6.11.7 All requirements for firefighting and fire prevention as laid down in Building Code of Pakistan – Fire Provisions 2016 will be followed for all Petrol Pumps / CNG Stations/ EV.

6.11.8 On an existing petrol pump, separate CNG facility will be allowed only if the plot area is 1000 Sq. yd. or more.

6.11.9 It is desirable that queuing vehicles do not block any driveway because this may cause a conflict between entering vehicles and traffic on the frontage road, or obstruct pedestrian flows on footpaths.

6.11.10 A single storey office and retail mart or shop will be permitted on an area not exceeding 15% of the plot area, provided area is available after provision of necessary services like fuel dispensers, tyre/puncture shop, service station, oil change station, and washrooms etc. as per OGRA requirements.

6.11.11 All building structures will be constructed leaving a COS of at least 10'-0" from the boundary of the plot of the Petrol, CNG & EV stations or according to standards of Explosives Department whichever is more.

6.11.12 Distance between two dispensers will not be less than 24'-0".

6.11.13 Distance between dispenser and road edge will not be less than 18'-0".

6.11.14 All title documents including site plan duly attested are to be supplied for Petrol, CNG & EV Station. In addition, permission from Ministry of Petroleum and Natural Resources is also required for CNG Station.

6.11.15 The compressor station will be located at a minimum distance of 5'-0" inside from the boundary walls and all measures provided in CNG Safety Rules, 1992, as amended from time to time will be implemented

6.11.16 The minimum street frontage of a petrol or CNG station will not be less than 60'-0".

6.12 Standards for Masjid: Masjid will be allowed on designated amenity plots.

6.12.1 Adequate provisions for handicapped persons at entrance/exit in the shape of ramp to be provided.

6.12.2 Construction of basement is not allowed. However, plots having a level difference of more than 6'-0" from road level can construct lower ground, open from all sides and dedicated as prayer hall.

6.12.3 Construction of Masjid will be G+2 in residential areas. However, Masjid falling in commercial areas will be constructed up to G+4.

6.12.4 Roof top utilization with folding shade arrangements may be allowed. Shades are not allowed to be converted into permanent or semi-permanent structure.

6.12.5 Windows on first and second floor facing towards residential side will be designed to ensure privacy of adjoining properties.

6.12.6 Footprint of Masjid will be as follows:-

6.12.6.1 Ground Floor 60% to 70% of plot area.

6.12.6.2 Subsequent Floors 50% to 60% of plot area.

6.12.7 Ablution area, washrooms & storage area can have multiple levels but should not exceed overall height of building.

6.12.8 No madrassa, maktab and hostel facility is allowed within masjid premises. Nazra Quran will only be allowed under CCTV cameras monitoring and weekly recording will be maintained by the masjid managing committee.

6.12.9 Height of Minaret will not exceed 100'-0" from road level.

6.12.10 Requirement of residence of Imam/ Moazzan or any other staff will be decided on case-to-case basis. The height of parapet wall will be

6'-0" on rooftop if used for prayer. The area for residence for imam/ moazzin/ khadimeen will be as follows:

6.12.10.1 Masjid up to 999 sq. yd.: Area for Imam Residence not exceeding 600 sq. ft. (2x bed, lounge, kitchen, attach bath(s) & store etc.) and Moazzin/ khadimeen residence 300 sq. ft. (1x bed, attach bath & kitchen etc.).

6.12.10.2 Masjid 1000 sq. yd. and above: Area for Imam Residence not exceeding 800 sq. ft. (3x bed, lounge, kitchen, attach baths & store etc.) and Moazzin/ khadimeen residence 450 sq. ft. (2x bed, attach bath & kitchen etc.).

6.12.11 Use of loud speakers will be restricted to Azaan only. Announcements, sermons and Khutbas including Juma Prayer is not allowed on loud speakers. However, necessary arrangements be made for hearing of the audience inside the masjid.

6.12.12 Masjid to function under PDOHA terms & conditions.

6.12.13 Change of status of Residential/ other categories of plots to Amenity status for the purpose of expansion of masjid will be considered in extreme circumstances, on case to case basis, fulfilling fol condtions:-

6.12.13.1 Proximity of other masjid, (No masjid within 500 M).

6.12.13.2 NOC of the neighbours.

6.12.13.3 Availability of space for parking in the vicinity.

Chapter VII Universal Accessibility Standards

7.1 Amenity and Commercial buildings will be Universal Accessibility Compliant. Building Plans will not be approved without fulfilling requirements of Universal Accessibility.

7.2 **Symbols of Accessibility:** Facilities and elements required to be identified as accessible will use the international symbol of accessibility. The symbol will be displayed at desired location.

7.3 **Volume Control Telephones:** A sign containing a depiction of a telephone handset with radiating sound waves will identify telephones required to have a volume control.

7.4 **Accessible Route:** All walks, halls, corridors, aisles, skywalks, tunnels, and other spaces that are part of an accessible route will comply with the required standards mentioned below: -

7.4.1 **Width:** The minimum clear width of an accessible route will be 3'-0" except at doors. A person in a wheelchair must make a turnaround obstruction; the minimum clear width of the accessible route will be as shown in following Figure 1: **Accessible Route 90 Degree Turn** and Figure 2: **Accessible Route Turns around an Obstruction**.

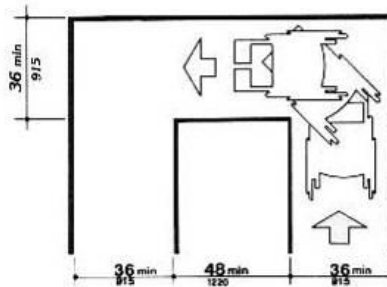


Figure 1: Accessible Route 90 Degree Turn

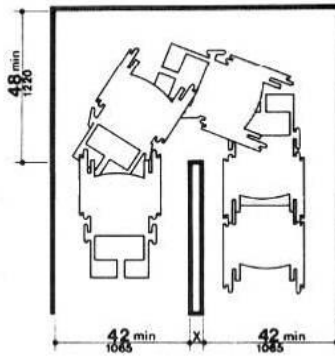


Figure 2: Accessible Route Turns around an Obstruction
 Note: Dimensions shown apply when x < 48 in (1220 mm)

7.5 Ramps

7.5.1 Slope and Rise (for FAR buildings): -The least possible slope will be used for any ramp. The maximum slope of a ramp in new construction will be 1:12. The maximum rise for any run will be 2'-6" (see below Figure 3: **Components of a Single Ramp Run and Sample Ramp Dimensions**). Curb ramps and ramps to be constructed on existing sites or in existing buildings or facilities may have slopes and rises as allowed if space limitations prohibit the use of a 1:12 slope or less.

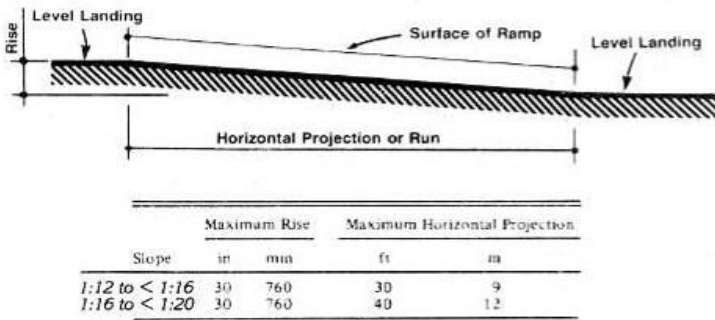


Figure 3: Components of a Single Ramp Run and Sample Ramp Dimensions

7.5.2 Clear Width: The minimum clear width of a ramp will be 3'-0".

7.5.3 Landings: Ramps will have level landings at bottom and top of each ramp and each ramp run. Landings will have the following features:

7.5.3.1 The landing will be at least as wide as the ramp run leading to it.

7.5.3.2 The landing length will be a minimum of 5'-0" clear.

7.5.3.3 If ramps change direction at landings, the minimum landing size will be 5'-0" by 5'-0".

7.5.4 Handrails: If a ramp run has, a rise greater than 0'-6" or a horizontal projection greater than 6'-0", then it will have handrails on both sides. Handrails are not required on curb ramps or adjacent to seating in assembly areas. Handrails will have the following features:

7.5.4.1 Handrails will be provided along both sides of ramp segments. The inside handrail on switchback or dogleg ramps will always be continuous.

7.5.4.2 If handrails are not continuous, they will extend at least 1'-0" beyond the top and bottom of the ramp segment and will be parallel with the floor or ground surface (see Figure 4: **Examples of Edge Protection and Handrail Extensions** below).

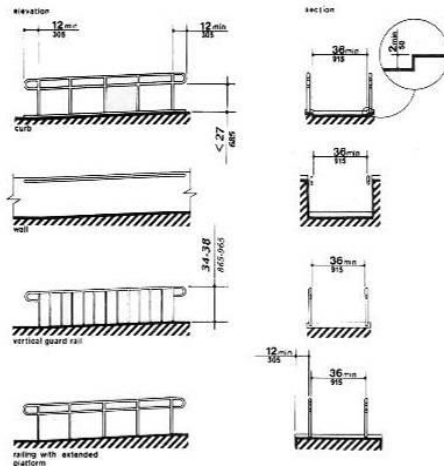


Figure 4: Examples of Edge Protection and Handrail Extensions

7.5.4.2.1 The clear space between the handrail and the wall will be 1.5".

7.5.4.2.2 Gripping surfaces will be continuous.

7.5.4.2.3 Top of handrail gripping surfaces will be mounted between 2'-10" and 3'-2" above ramp surfaces.

7.5.4.2.4 Ends of handrails will be either rounded or returned smoothly to floor, wall, or post.

7.5.4.2.5 Handrails will not rotate within their fittings.

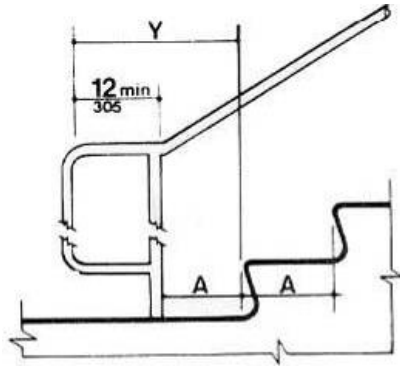


Figure 5: Stair Handrails - Extension of Bottom of Run

(Note Y is the minimum handrail extension of 1'-0" plus the width of one tread that is required at each bottom riser)

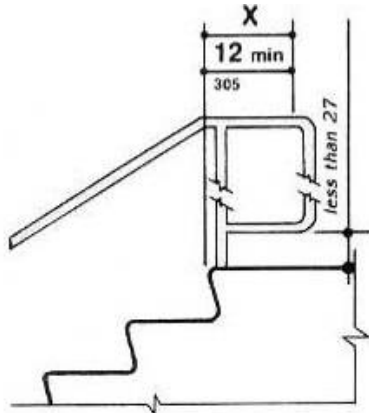


Figure 6: Stair Handrails - Extension of Top of Run

(Note: X is the 1'-0" minimum handrail extension required at each top riser)

7.5.4.2.6 The clear space between handrails and wall will be 1.5".

7.5.4.2.7 Gripping surfaces will be uninterrupted by newel posts, other construction elements, or obstructions.

7.5.4.2.8 Top of handrail gripping surface will be mounted between 2'-10" and 3'-2" above stair nosing.

7.6 Elevators: Elevators will be on an accessible route and will comply with the ASME A17.11990, Safety Code for Elevators and Escalators. Freight elevators will not be considered as meeting the requirements of this section unless the only elevators provided are used as combination passenger and freight elevators for the public and employees.

7.6.1 Braille notations indicating the floor levels will be incorporated next to each button at the handicap Car Operating Panel (COP) and handicap hall call buttons.

7.6.2 Hand rail not less than 2'-0" long at 3'-0" above the floor level will be fixed adjacent to the control panel.

7.6.3 Car operating panel inscription shall be provided in Braille, level to be lower than the normal, to be accessible by a person sitting on wheel chair.

7.6.4 Elevator operation will be automatic. Each lift will be equipped with a self-levelling feature that will automatically bring the lift to floor landings within a tolerance of 0.5" under rated loading to zero loading conditions. This feature will be automatic and independent of the operating device and will correct the over-travel or under-travel.

7.6.5 Call buttons in elevator lobbies and halls will be centered at 3'-6" above the floor. Such call buttons will have visual signals to indicate when each call is registered and when each call is answered. Call buttons will be a minimum of 0.75" in the smallest dimension. The button designating the up direction will be on top. (See Figure 7: **Car Control Panels Detail**). Buttons will be raised or flush. Objects mounted beneath hall call buttons will not project into the elevator lobby more than 3.75" .

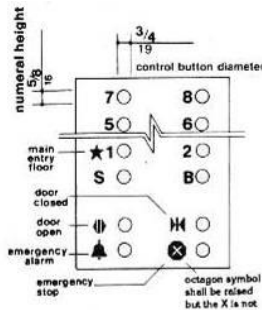


Figure 7: Car Control Panels Detail

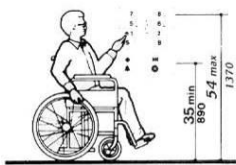


Figure 8: Car Control Height

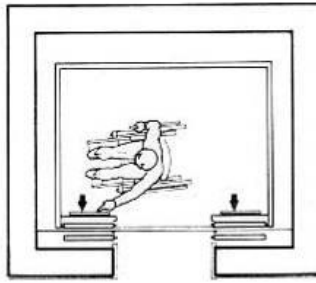


Figure 9: Car Controls - Alternate Locations of Panel with Center Opening Door

7.6.6 Floor Plan of Elevator Cars: The floor area of elevator cars will provide space for wheelchair users to enter the car, manoeuvre within reach of controls, and exit from the car. Acceptable door opening and inside dimensions will be as shown in Figure 10: Hoist-way and Elevator Entrances below. The clearance between the car platform sill and the edge of any hoist-way landing will be no greater than 1.25”.

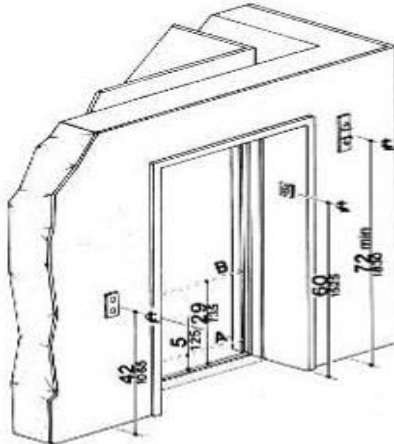


Figure 10: Hoist-way and Elevator Entrances

(Note: The automatic door reopening device is activated if an object passes through either line A or line B. Line A and line B represent the vertical locations of the door reopening device not requiring contact.)

7.7 Doors: Doorways will have a minimum clear opening of 2'-8" with the door open 90 degrees, measured between the face of the door and the opposite stop (see Figure 11: **Clear Doorway Width and Depth Detail**, Figure 12: **Clear Doorway Width and Depth Hinged Door**, Figure 13: **Clear Doorway Width and Depth Sliding Door**, Figure 14: **Clear Doorway Width and Depth Folding Door**, Figure 15: **Clear Doorway Width and Depth, Maximum Doorway Depth**). Openings more than 2'-0" in depth.

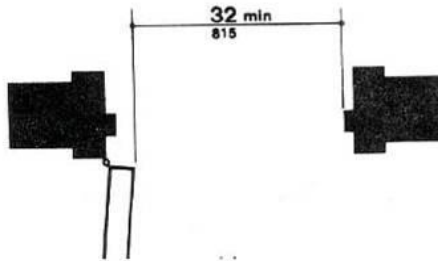


Figure 11: Clear Doorway Width and Depth Detail

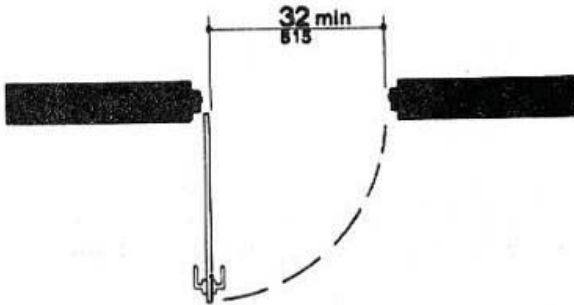


Figure 12: Clear Doorway Width and Depth Hinged Door

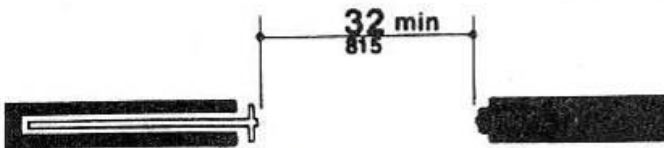


Figure 13: Clear Doorway Width and Depth Sliding Door

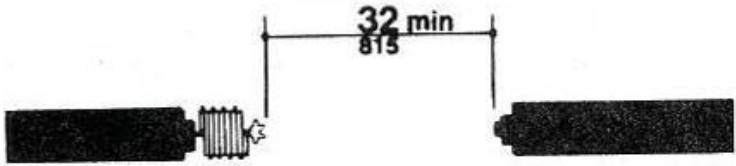


Figure 14: Clear Doorway Width and Depth Folding Door

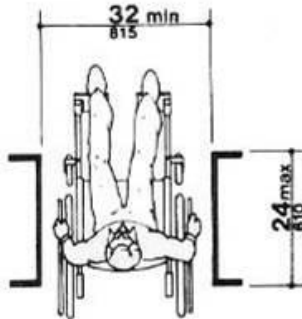


Figure 15: Clear Doorway Width and Depth, Maximum Doorway Depth

7.7.1 Manoeuvring Clearances at Doors: Minimum manoeuvring clearances at doors that are not automatic or power assisted will be as shown in following Figure 16: **Manoeuvring Clearances at Doors**. The floor or ground area within the required clearances will be level and clear.

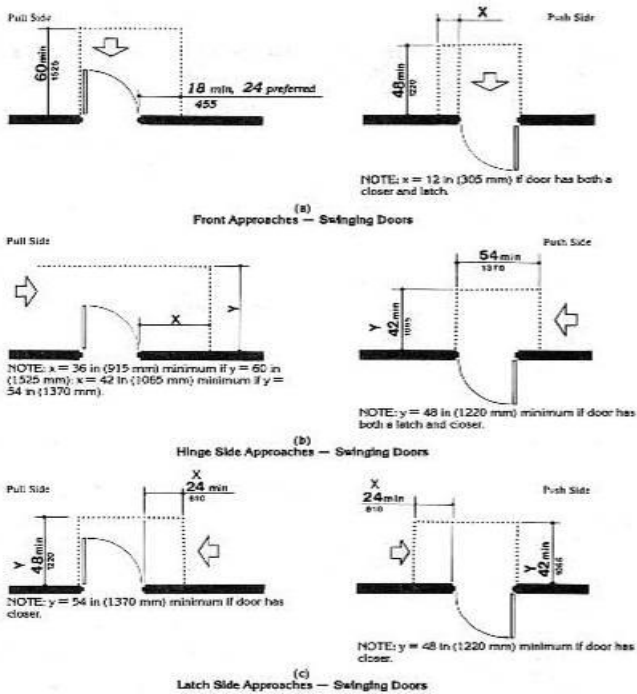


Figure 16: Manoeuvring Clearances at Doors

(Note: all doors in alcoves will comply with the clearances for front approaches)

7.8 Water Closets: Water Closet will have following standards: -

7.8.1 Clear Floor Space at Water Closets: Clear floor space for water closets not located in stalls will comply with following. Clear floor space may be arranged to allow either a left-handed or right-handed approach.

Figure 17: Clear Floor Space at Water Closets

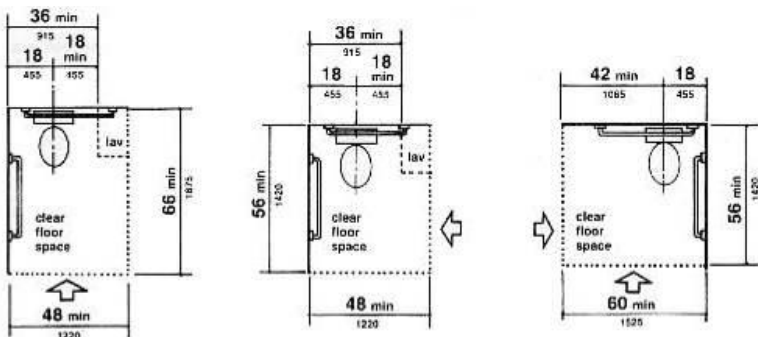


Figure 17: Clear Floor Space at Water Closets

7.8.2 Height: The height of water closets will be 1'-5" to 1'-6" measured to the top of the toilet seat (see Figure 18: **Grab Bars at Water Closets**). Seats will not be sprung to return to a lifted position.

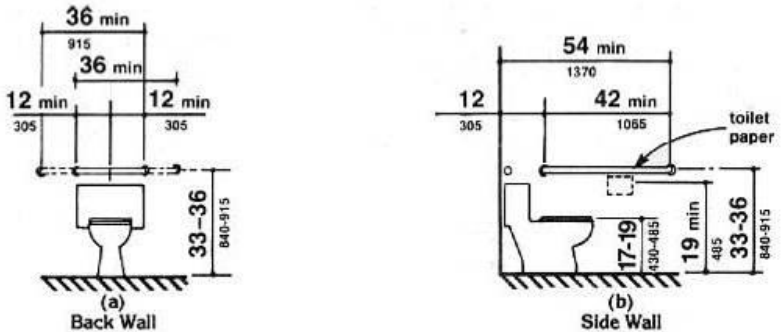


Figure 18: Grab Bars at Water Closets

7.8.3 Grab Bars: Grab bars for water closets not located in stalls will comply with Figure 19: **Grab Bars at Water Closets Side Wall** below. The grab bar behind the water closet will be 3'-0" minimum

7.8.4 Grab bars, complying with the length and positioning shown in following figures, will be provided. Grab bars may be mounted with any desired method as long as they have a gripping surface at the locations shown and do not obstruct the required clear floor area.

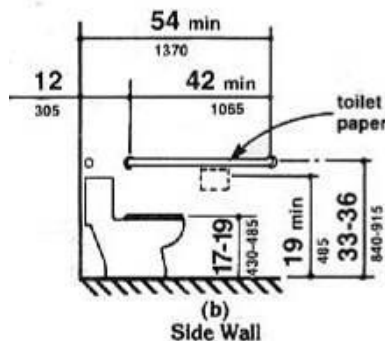


Figure 19: Grab Bars at Water Closets Side Wall

7.9 Toilet Stall:

7.9.1 Size and Arrangement: The size and arrangement of the standard toilet stall will comply with **Figure 20** below, Standard Stall. Standard toilet stalls with a minimum depth of 4'-8" will have wall-mounted water closets. If the depth of a standard toilet stall is increased at least 3", then a floor-mounted water closet may be used. Arrangements shown for standard toilet stalls may be reversed to allow either a left or right hand approach.

7.9.2 Doors: If toilet stall approach is from the latch side of the door, clearance between the door side of the stall and any obstruction may be reduced to a minimum of 3'-6".

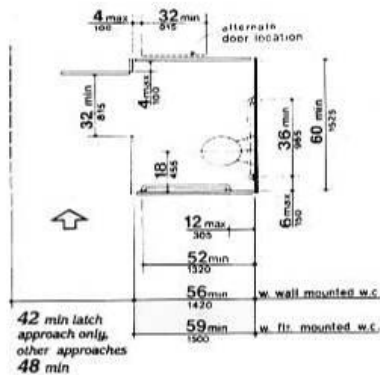


Figure 20: Toilets Stalls - Standard Stall

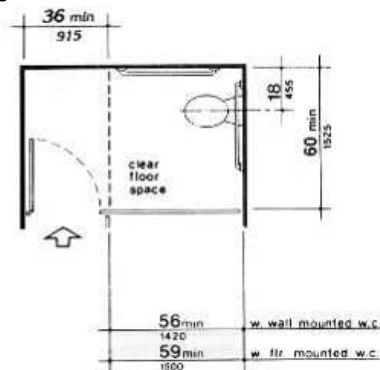


Figure 21: Toilets Stalls - Standard Stall (End of Row)

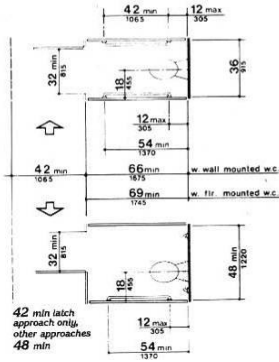


Figure 22: Toilet Stalls - Alternate Stalls

Chapter VIII Parking Requirements

Parking requirements for vehicles in these Regulations will be applicable in following conditions: -

8.1 A new building is constructed or a change of use of existing building is established.

8.2 An existing building is altered and there is an increase in the floor area of the building, then additional parking requirement will be applicable to the proposed addition only within the property limits as required under these Regulations.

8.3 General Conditions: The parking space, including ramps, will be exempted from FAR.

8.3.1 Upward ramp is not allowed in COS. Only downward ramp is permitted in COS. Ramp will be excluded from footprint area.

8.3.2 Total parking requirement of every building will be determined as a sum of parking requirement for each type of use of the building.

8.3.3 Toilets (including washbasin) for drivers in the parking space must be provided as one toilet per 50 bays and so on. The ratio must be maintained if number of bays increases more than 50. For example, 61 bays would require two toilets.

8.3.4 Detailed plan will be submitted showing entry, exit, and gradient of ramp, turning radius, storage spaces, circulation and movement of vehicles.

8.3.5 Electro-mechanical ventilation/ exhaust will be provided for parking in the basement(s).

8.3.6 Construction of double basement for car parking is permitted with sound engineering practices ensuring safety of adjoining structures and services.

8.3.7 At least 16% of the total parking space will be utilized for motorcycle parking.

8.3.8 When units of measurement used in computing the number of parking spaces result in the requirement of a fractional space, the nearest whole number to next higher side of parking spaces will be taken.

8.3.9 Car lift in addition to vehicular ramp is allowed for facilitation of universal accessibility.

8.3.10 Minimum 4 parking bays out of every 100 parking bays will be ear marked, duly labelled as such, for universal accessibility/ senior citizen at the most convenient location.

8.3.11 Dedicated parking for all type of buildings (Residential, Commercial, and Amenity) should be provided within the premises as per the required numbers based on the planned capacity. Major or associated roads will not be utilized for car parking

8.3.12 Access aisle will be provided along with parking bay dedicated for universal accessibility as under:

8.3.12.1 Access aisle in between two parking bays minimum 5'-0".

8.3.12.2 Access aisle for single parking bay minimum 4'-0".

8.3.13 Ramp width for amalgamated plots up to 800 sq yd shall be 11'-0" minimum.

8.4 Application of Parking Requirements: Minimum one motor vehicle parking space will be provided for

8.4.1 Every 800 sq. ft. of floor area for retail shops area, business offices, for all facilities of hotels e.g. bedrooms, restaurants, conference room, indoor recreational area & retail outlets.

8.4.2 Every 1000 sq. ft. of floor area for apartment/ flat of commercial building.

8.4.3 Every 4000 sq. ft. of floor area for all educational institutions or minimum three fourth of motor vehicle parking space will be provided per classroom whichever is more.

8.4.4 Every 1500 sq. ft. of floor area for hospitals.

8.5 Standards for Parking Spaces: The following will be standards for parking space:

Table 11: Standards for Parking Spaces

Description	Car	Motorcycles
Bay width	8'-0"	2'-6"
Bay length	16'-0"	6'-0"
Gradient of ramp	1:7.5	1:7.5
Straight turning radius (outer)	24'-0"	-
Helical ramp turning radius (outer)	32'-0"	-
Lot turning radius	17'-6"	-
Minimum ramp & driveway width:		
Two-way traffic	18'-0"	-
One way traffic	11'-0"	-

Chapter IX Water Supply/ Drainage/Sanitation

9.1 Water Supply: No person is permitted to install motor/pump on the water supply line. Only one connection will be provided for each plot.

9.1.1 PDOHA has no obligation for provision of water for swimming pool.

9.2 Residential: Only one underground water tank is permitted per plot but not on the slope side and be so located/ designed such that bowser filling is facilitated.

9.2.1 Under ground water, septic tank and grey water tank to be constructed with RCC walls and water proofed to avoid leakage/ seepage.

9.2.2 Washing of car on the road is not allowed.

9.2.3 Flow of water through car porch on the road is not allowed.

9.2.4 Boring for the purpose of water may be permitted within the plot line subject to fulfilment of conditions as prescribed by PDOHA.

9.3 Commercial: Construction of under-ground water tank is mandatory but not on the slope side and be so located/ designed such that bowser filling is facilitated.

9.3.1 Separate water meter connection to be installed by owners of office/ shop/ flats in commercial buildings.

9.3.2 Overhead water tank will be designed to cater for firefighting and other uses. It must house the connections in a manner that water can be used for normal utility and for firefighting in case of fire.

9.4 Sewerage/ Manhole: Regulations regarding house connection to main sewer are as under: -

9.4.1 W.C discharge to be connected with manhole through septic tank.

9.4.2 Wash room and kitchen drainage will be connected directly to over flow manhole of septic tank. It must not be connected to inlet of septic tank.

9.4.3 Rain water/storm water is to be disposed in open drains or on the adjacent roads as per design of the said Phase. It must not be connected to the sewer lines.

9.4.4 RCC septic tanks and manholes shall be constructed.

9.4.6 Sewerage disposal of bath rooms/toilets in basement shall be done through mechanical pumps.

9.5 Septic Tank: Buildings will have a septic tank constructed as per approved design with a retention capacity for at least seven days.

9.5.1 Septic tanks will be so constructed as to be impervious to liquid either from the outside or inside and located as not to liable to pollute any water reservoir/ tank, the water of which is used for drinking or domestic purposes. Distance between septic tank and underground water tank should be minimum 4'-0".

9.5.2 Any settlement tank or septic tank will be of suitable depth adequate size with capacity not less than 95 cubic feet, covered or fenced and adequately ventilated and constructed with mean of access for the purpose of inspection of the inlet and outlet emptying and cleaning.

9.6 Connection to Public Sewer: Sludge water will be conveyed through septic tank to public sewer. Sewer connections will not be granted without septic tanks for following category of plots:

9.6.1 Commercial plots 251 sq. yd. and above

9.6.2 Amalgamated Commercial plots 400 sq. yd. and above.

9.6.3 Residential plots 201 sq. yd. and above.

9.7 Trenches for Drains and Private Sewers: Drain or sewer constructed adjacent to a load bearing part of building, precautions will be taken to ensure that trench should not impair the stability of the building.

9.7.1 Where any drain or private sewer is adjacent to a wall and the bottom of the trench is lower than the foundation of the wall. The trench will be filled in with concrete to a level that is not lower than the bottom of the foundation of the wall, by more than the distance from that foundation to the near side of the trench less than 0'-6".

9.7.2 Where the trench is within 3'-0" of the foundation of the wall, the trench will be filled with concrete to the level of the underside of the foundation.

9.8 Plumbing ducts/ shafts to be provided within the plot boundary. No plumbing lines are allowed on the exterior wall that is outside the property line.

9.9 Janitorial Store will be provided in all public use buildings like school, masjid, hospital etc. with a minimum size of 15 sq. ft. for storage of sanitation equipment etc.

9.10 Sanitary Provisions: The minimum sanitary provisions as prescribed will be followed as under:

9.10.1 Single rooms: For every 5 single room units or servant quarters, 1 washbasin, 1 W.C. and 1 bathroom will be provided.

9.10.2 Boarding or Guest Houses: For every 10 bedrooms or less in a boarding house or guesthouse at least 2 W.C, 2 washbasins and 2 showers will be provided.

9.10.3 Dormitory or Hostels: For every 20 persons in a dormitory and hostel, there will be at least 3 W.C, 3 washbasins and 3 showers, and for every 10 additional persons 1 W.C., 1 washbasin, and 1 shower is to be added.

9.10.4 Office: In an office with 20 persons calculated at a rate of one person per 120 Sq. ft., minimum of 2 W.Cs, 2 washbasins and 1 urinal. For every additional 20 persons there will be one 1 W.C., 1 washbasin and 1 urinal. 1 washbasin or equivalent washing space per 25 or less persons will be provided for ablution purposes.

9.10.5 Shopping Centre: A minimum of 3 W.C, 1 urinal, and 1 washbasin will be provided for 3000 sq. ft. total floor area. For every additional 2000 sq. ft. floor area, 1 W.C., 1 washbasin and 1 urinal will be provided.

9.10.6 Public Assembly Building: 2 W.C, 1 washbasin, and 3 urinals will be provided for 1500 sq. ft. total floor area and for every additional 1500 sq. ft. total floor area 1 W.C., 1 washbasin and 2 urinals will be provided.

9.10.7 Masjid: Minimum sanitation requirements are as follows:

9.10.7.1. Residential areas: Ratio of 1:50 for ablution arrangements along with 2x W.C and 1x shower room for 200 Namazis.

9.10.7.2. Commercial areas: Ratio of 1:25 for ablution along with 4x W.C and 1x shower room for 200 Namazis.

9.10.7.3. Industrial area: Ratio of 1:10 for ablution arrangements along with 6x W.C and 3x shower room for 200 Namazis.

9.10.8 School: 4 W.C.'s and 2 washbasins per 100 students and for every additional 50 students, 1 W.C. and 1 washbasin will be provided.

9.10.9 Hospital: For every 10 beds in a general ward, there will be at least 1 water closet, 1 washbasin, 1 ablution tap and 1 bathroom with shower. 1 kitchen sink will be provided in each ward.

9.10.10 Restaurants: For 50 seats of restaurant, 1 water closet, 1 urinal, 1 washbasin will be provided.

9.10.10.1. All fixtures will be divided proportionately amongst the genders.

9.10.10.2. 2 urinals may be replaced by W.C., while proportionately dividing the fixtures for ladies.

9.10.11 Handicapped Persons:

9.10.11.1. Provision of 1 W.C. for disabled persons will be provided.

9.10.11.2. Shopping centres, Masjid, clubs, hotels, restaurants and schools must have adequate arrangements of toilets for special / disabled persons.

Chapter X Lighting and Ventilation

10.1 Size of External Openings: Every room, other than rooms used for the storage of goods, will have natural light and natural ventilation by means of one or more openings in external walls. These openings will have a combined area of not less than 10 % of floor area for habitable rooms and 7.5 % for other rooms, and the whole of such openings will be capable of allowing free and uninterrupted passage of air.

10.2 Area for openings of warehouse, godown, storage places etc. will not be less than 5 % of the floor area unless space is ventilated mechanically.

10.3 Garages: Every garage will be provided with opening of not less than 5 % of the floor area for ventilation and lighting.

10.4 Staircase: 7.5 % of the staircase area will be provided with opening for adequate lighting and ventilation.

10.5 Size of Internal Openings: Unless the light and ventilation requirements are met through external openings, all internal habitable rooms will have openings in internal well(s) or ventilation duct in addition to door openings not less than 7.5 % of the floor area of such room.

10.5.1 Internal Air Wells for Habitable Room: Sizes of internal air wells for daylight and natural ventilation of habitable rooms will be as under:

10.5.1.1 Buildings up to 2 storeys, 50 sq. ft. with minimum width of well 5'-0".

10.5.1.2 Buildings with 3 to 5 storeys, 100 sq. ft. with minimum width of well will be 8'-0".

10.5.1.3 Buildings higher than 5 storeys, 100 sq. ft. plus 10 sq. ft. for each additional floor, minimum width of well will be 10'-0".

10.5.2 Internal Air Wells for Kitchen, WC and Bathroom: Sizes of internal air wells for daylight and natural ventilation of kitchen, WC and bathroom will be as under:

10.5.2.1 Building up to 2 storeys, 20 sq. ft. with minimum width of well will be 3'-0".

10.5.2.2 Building with 3 to 5 storeys, 40 sq. ft. with minimum width of well will be 5'-0".

10.5.2.3 Buildings higher than 5 storeys, 40 sq. ft. plus 5 sq. ft. for each additional floor with minimum width of well will be 5'-0".

10.6 For residential plots up to 200 sq. yd., the allowable foot print will prevail over minimum width of duct. In any case the width of duct will not be less than 3'-0".

10.7 For commercial plots with B+G+4 floors and B+G+5 floors (falling in standard commercial belt) a compulsory ventilation duct from first floor upward would be provided for light and ventilation to inner parts of the building such as habitable rooms, kitchen and bath etc. The area of duct in this case may be maintained at 40 sq. ft. with minimum width 5'-0"

10.8 Access for maintenance of each such shaft will be provided at lowest level of the shaft.

10.9 Permanent Openings in Kitchen: Every kitchen will have openings for permanent ventilation into the external air space not less than 15 % of its floor area.

10.10 Water Closet, Bath Room and Ablution Places: Every appliance including water closet, urinal stall, and bathroom or ablution area will be provided with natural lighting and ventilation with openings in external walls having a combined area of not less than 2 sq. ft. per appliance except where adequate and permanent mechanical ventilation is provided which discharges into open space.

10.11 Mechanical Ventilation and Central Air Conditioning

10.11.1 Where undertaking for central air conditioning and permanent mechanical ventilation is provided, the relevant clauses of these Regulations dealing with natural ventilation, lighting and heights of rooms may be relaxed depending upon the duct size of A.C.

10.11.2 Where permanent mechanical ventilation in respect of lavatories, water closets, bathrooms or corridors is provided and maintained,

conditions relating to natural light and ventilation under these Regulations may be relaxed for such lavatories, water closets, bathrooms or corridors.

10.11.3 To promote indoor air quality in air conditioned buildings with mechanical ventilation will be as per prevalent ASHRAE requirements.

10.12 Acoustic Comfort and Control: Commercial buildings where FAR is applicable along with all healthcare and educational buildings. Where central air conditioning is used, the acoustic performance relating to Internal Noise Criteria from External Noise Sources, Internal Noise Criteria from Mechanical Services Noise, Internal Airborne Sound Insulation Guidance Values and Internal Impact Sound Pressure Levels meet the control requirements as set out as per prevalent ASHRAE requirements.

Chapter XI Building Design & Construction Requirements

11.1 Loads and Design: Structure analysis, design and detailing will be in accordance with the requirements of current versions in practise of Building code of Pakistan, codes prescribed by American Concrete Institute (ACI), American Institute of Steel Construction (AISC), American Society of Civil Engineers (ASCE), Uniform Building Code (UBC) and International Building Code (IBC).

11.2 Seismic Design: Seismic Risk Zone for Karachi will be Zone-2B (with reference to UBC-97).

11.3 Sub Soil Investigation: In view of the structural design in seismic hazard zone, type of sub-soil for foundation should be thoroughly ascertained by geo-technical investigation under the direct supervision of qualified and experienced geo-technical engineers duly registered in PDOHA/ CBC. The detailed soil investigation report submitted to PDOHA should correlate sub-soil type with UBC-97, or current sub-soil list and will provide a detailed in depth analysis.

11.4 Bearing Capacity Test: The bearing capacity test should be carried out through a Registered Geo-Tech Consultant.

11.5 Wind Load: Wind load should be based on the velocity and gust factors data from local Meteorological Department.

11.6 Erection on Reclaimed Site: No building foundation will be erected upon a site reclaimed by town sweepings or other refuse, except on recommendation of geo-technical and structural engineer.

11.6.1 No building plans will be approved on open nallahs public sewers.

11.7 Protection of Existing Services: During the excavation in connection with building works or services, adequate precautions will be taken to secure the existing services.

11.8 Foundation near Drains: Where a building is to be erected adjacent to existing buildings, or near a drain or nallah, or an excavation at a distance less than depth of the said drain or nallah or excavation, or such as to affect the stability of drains or nallahs. The owner through a structural engineer will satisfy the PDOHA that the foundation of the building has been carried down to a level, safe guarding its stability.

11.9 Foundation Design: In case, raft foundation is insufficient to support the building foundation within the boundary of plot area, it can be extended on roadsides up to 3'-0". However, any sort of damage occurred to services will be repaired by the owner at its own expense. This provision is applicable to plot sizes up to 200 sq. yd. with basement only.

11.10 Specifications: Specifications of material quality control and workmanship will be of high quality and in accordance with the requirements of ACI Building Codes, UBC and ASTM Standards.

11.11 Testing of Materials: Regular testing will be carried out of materials such as aggregates, cement, concrete, reinforcing steel and all architectural materials, the quality control and quality assurance criteria laid down in standards of FIDIC, ASTM, ACI or UBC and project specifications.

11.12 Supervision: Supervision/ quality assurance will be responsibility of Owner/ Contractor. Safety must be ensured as per construction standards, failing which construction work will not be allowed. Construction will be under the supervision of a full time Engineer(s), as required in these Regulations. Contractors, Builders or Developers will arrange full time supervisory staff to carry out supervision and quality control of buildings covered in these Regulations. Contractor is liable to ensure all required measures w.r.t. health & safety at the site.

Chapter XII Guidelines for Sustainability of Commercial / Amenity Buildings

12.1 All buildings are to be developed based on the facade policy and the following design elements as provided be incorporated in the façade.

12.1.1 Windows: Windows should have the following: -

12.1.1.1 Frames for all windows & ventilators are to be anchored on masonry with hardened rubber sandwich in between, apart from using silicon for water proofing purposes.

12.1.1.2 In case of sliding windows, rubber gasket to be used between the sliding panels & edges of panels.

12.1.2 Window Glass: Window glass should have following criteria: -

12.1.2.1 All Glass to be used may be double glazed conforming 60% reflective, high performance glass for heat.

12.1.2.2 It is mandatory to use tempered glass in commercial and amenity buildings to minimize accidents.

12.1.3 Façade Material: Material must be robust, maintenance free, environment friendly, sustainable, durable, weather resistant and fire retardant. This may include but not limited to Aluminium Composite Panel (ACP), stone, marble, granite, colour crete, fair faced concrete, tiles and cladding.

12.1.4 External Walls (Insulated): All external walls may be provided with insulation on hollow blocks, light weight insulation blocks or blocks with insulation or cavity wall etc., on south and west facades of all commercial buildings for energy conservation with emphasis on following: -

12.1.4.1 Minimum Envelope Performance Requirements: For all new commercial buildings, exterior building elements may have average thermal transmittance (also known as U Value), shading coefficients (SC) and light transmittance (LT).

12.1.4.2 Plumbing & Other Services: To maintain the aesthetics of buildings, no pipes will be visible on all elevations. Independent pipe chases, ducts or shafts will be provided.

12.1.5 Side Walls: Sidewalls adjacent to empty plots will be plastered with grooves and painted.

12.1.6 Corner Plots: All sides of a corner plot are to be treated as front elevation i.e. no visible plumbing. External air conditioning units to be

adequately camouflage on any elevation. All external air conditioning units to be placed on roof, balcony or in ducts via pipe chases.

12.1.7 Insulated Roofs: All roofs will be provided with water proofing membranes along with insulation / Insulated tiles.

12.2 Solar Water Heaters (SWH): Building to have: -

12.2.1 Solar Water Heaters (SWH) with appropriate automatic electric/gas backup system is recommended.

12.2.2 For SWH, plastic materials will preferably be used, which are resistant to UV radiation and to the temperatures minimum 95°C. Insulate all hot water pipes connected to SWH preferably to reduce heat losses from hot water mains.

12.2.3 Solar Water Heating System: For all new buildings and sports facilities, a solar water heating system is recommended to provide 75% of hot water requirements. Solar water heating installations be fitted with insulated storage tanks and pipes, sized and fitted in accordance with the solar panel manufacturer's requirements for each specific application. The supplementary heating system will be controlled so as to obtain maximum benefit from the solar heater before operating.

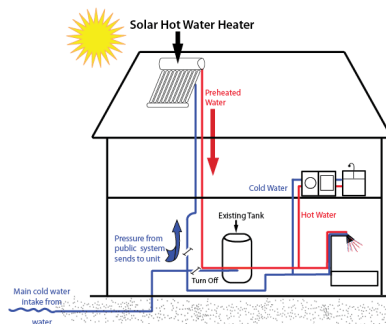


Figure 23: Solar Water Heating System

12.3 Energy: Energy conservation has to be kept in all designs to promote sustainability:

12.3.1 Provide adequate natural daylight to reduce reliance on electrical lighting and to improve conditions for the occupants.

12.3.2 Buildings to provide direct line of sight to the outdoor environment

12.3.3 To ensure high quality indoor spaces all ventilation system outdoor air intakes must be located at suitable distance from potential sources of contamination to reduce the possibility of odour or air contaminants entering the ventilation.

12.3.4 Exhausted air must be discharged in a manner to avoid it being drawn back into the building.

12.3.5 Indoor air quality testing is recommended prior to occupancy.

12.4 Air protection systems for hazardous fumes: Where activities produce hazardous fumes or chemicals, spaces must be provided with separate air extraction systems to create negative pressure and exhaust the fumes or chemicals to ensure they do not enter adjacent rooms.

12.4.1 HVAC Maintenance: The cleanness of HVAC systems must be maintained and all parts must be inspected and cleaned by specialized maintenance companies.

12.4.2 Air Quality in Parking Spaces: Electro-mechanical ventilation is recommended to ensure that the Carbon Monoxide (CO) concentration in the enclosed parking area is maintained below fifty (50) parts per million (ppm) by:

12.4.2.1 Providing a minimum of six (6) outside air changes per hour, or

12.4.2.2 Installing a variable volume ventilation system.

12.4.2.3 Increase energy efficiency through lighting control:

12.4.2.4 Occupant Lighting Controls may be provided so as to allow lighting to be switched off when daylight levels are adequate or when spaces are unoccupied and to allow occupants control over lighting levels.

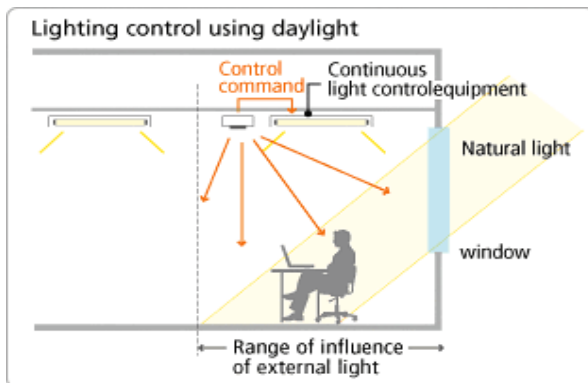


Figure 24: Lighting Control using daylight

12.4.3 Corridors and lobbies should reduce lighting levels to no more than 25% of normal when unoccupied.

12.4.4 In offices and education facilities, all lighting zones must be fitted with occupant sensor controls capable of switching the electrical lights on and off.

12.4.5 To Increase energy efficiency through lighting control.

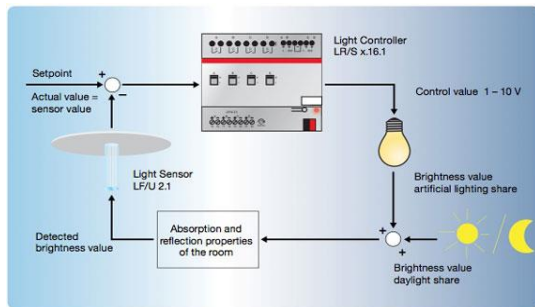


Figure 25: Energy Efficiency through Light Control

12.4.6 Achieve energy efficiency in HVAC systems in accordance with the standards approved by PDOHA or American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1-2010, Section 6.4.3.

12.4.7 Sub-division of systems into separate control zones to correspond with each area of the building that has a significantly different solar exposure, or cooling load, or type of use. All separate control zones must be capable of:

12.4.7.1 Independent temperature control;

12.4.7.2 Inactivation when the building, or part of building served by the system, is not occupied.

12.4.7.3 Operation of central plant only when the zone systems require it.

12.4.8 To minimize heat loss and prevent condensation:

12.4.8.1 Pipes and ducts passing through conditioned spaces must be insulated in accordance with BSI British Standard BS 5422:2009.

12.4.8.2 Insulation materials used must meet the requirements of Regulations, Thermal and Acoustical Insulation Materials or BS 5422:2009, whichever is the more stringent. All insulation installations must have a suitable vapour barrier and protection from UV light.

12.5 Small to Medium Scale Embedded Generators: When a building incorporates on-site generation of electricity from small or medium scale embedded generators using renewable energy sources; the equipment, installation and maintenance of the system must be stand-alone (off-grid) or, if connected to the local Electricity grid, comply to all specifications and standards set by the electricity utility company.

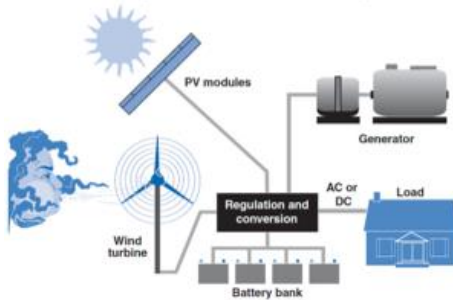


Figure 26: Regulation and Conversion

12.6 Energy efficient elevators and escalators

12.6.1 Escalators will change to a slower speed or when no activity has been detected for a period of a maximum of 3 minutes and will shutdown for 15-minute inactivity. Energy efficient soft start technology can be used. The escalator will start automatically when required; the activation will be by photocells installed in the top and bottom landing areas.

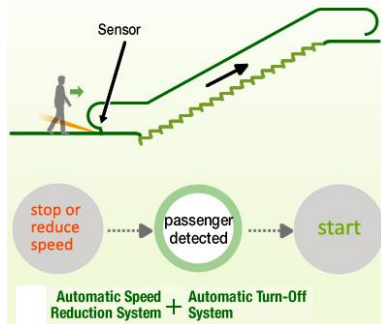


Figure 27: Energy efficient elevators and escalators

12.6.2 Elevators should use AC Variable-Voltage and Variable-Frequency (VVVF) drives on non-hydraulic elevators. Energy efficient lighting inside the elevator including controls to turn lights off when the elevator has been inactive for a period of a maximum of 5 min.

12.7 Minimize Duct Work Air Leakage: Ductwork with its equipment with an external static pressure exceeding 250Pa and all ductwork exposed to external ambient conditions or within unconditioned spaces must be pressure tested prior to occupancy in accordance with a method approved by local Administration and a compliant amount of air leakage achieved.

12.7.1 Duct work leakage testing is recommended to be carried out.

HVAC SYSTEM LEAKS

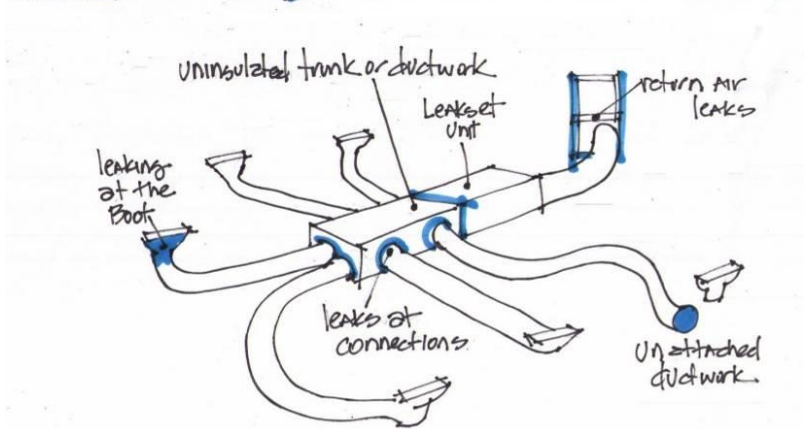


Figure 28: HVAC system leak

12.7.2 HVAC systems must be accessible for regular inspection, maintenance and cleaning of the equipment.

12.7.3 The manufacturers or suppliers of equipment or according to the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 62.1 – 2010 or equivalent should develop a maintenance manual and schedule.

12.7.4 Service records including details of both preventative and corrective maintenance must be kept onsite and be available for inspection.

12.7.5 Ensure the proper operation of building services in new buildings with a cooling load of 1MW or greater. Commissioning must be carried out in accordance with the CIBSE Codes listed below or any other commissioning Standard or Code approved inspection.

12.7.6 Commissioning results must be recorded and available for inspection. A systems manual must be developed and provided to the building owner or facilities operator by the vendor following commissioning.

Table 12: Chartered Institution of Building Services Engineers (CIBSE)

CIBSE Codes
The Chartered Institution of Building Services Engineers (CIBSE) Commissioning Code, Air Distribution Systems, Code A-2006' Restaurants
CIBSE Commissioning Code, Water Distribution Systems, Code W-2003
CIBSE Commissioning Code, Lighting, Code L-2003
CIBSE Commissioning Code, Automatic Controls, Code C-2001' for central control and Building Management System (BMS)
CIBSE Commissioning Code R: 2002 Refrigeration Systems
CIBSE Commissioning Code B: 2002 Boilers

12.7.7 It is recommended to provide full central control of all the building's technical systems



Figure 29: Building Energy Management System

12.8 Water Conservation: to promote water conservation following may be considered:

12.8.1 Water-saving fixtures should comply with minimum flow rates given.

12.8.2 For water efficiency, dual flush tank, Automatic (proximity detection)/ push button faucets in public spaces and Cisterns with manual or automatic flush controls may be installed.

12.8.3 Faucets installed as a component of a specialized application may be exempted from the flow rates upon application to Administration.

Table 13: Minimum Flow Rate

Fixture Type	Maximum Flow Rate
Showerheads	8 Liters Per Minute
Hand wash basins	6 Liters Per Minute
Kitchen sinks	7 Liters per minute
Dual Flush Toilets	6 Liters Full flush, 3 Liters Part flush
Urinal	1 Liter per flush or waterless

12.8.4 To promote water recycling, for all new buildings with cooling loads equal to or greater than 400 KW. Condensate water from all air conditioning equipment units handling outside air, or a mixture of return air and outside air where the outside air is not preconditioned must be recovered and used for irrigation, toilet flushing, or other onsite purpose where it will not be exposed to the human body.

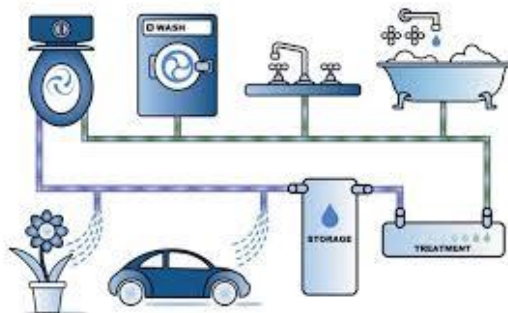


Figure 30: Water Recycling System

12.8.5 To promote water efficiency in irrigation:

12.8.5.1 100% of the total exterior landscaping must be irrigated using non-potable water, drip, or subsoil water delivery systems.

12.8.5.2 All irrigation systems must incorporate, at any point that they connect to a potable water supply, backflow prevention devices which must be checked every 12 months. Testing must be in line with the manufacturer’s recommended practice for field-testing.

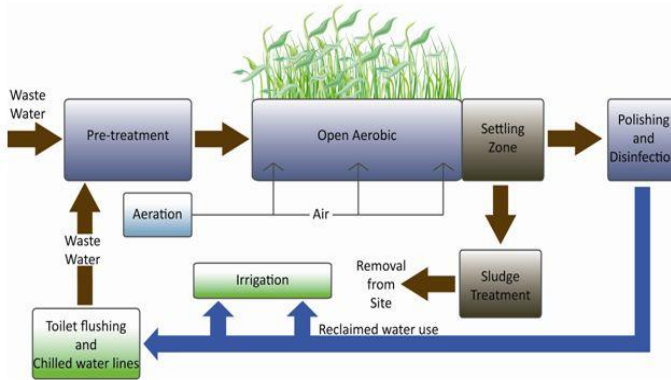


Figure 31: Water Efficiency in Irrigation

12.8.6 To promote Grey water reuse:

12.8.6.1 The building must be dual-plumbed for the collection and recycled use of grey water. Pipes, which transport grey water, must be colour-coded differently from pipes that are used for potable water and be labeled ‘Not Suitable for Drinking.’

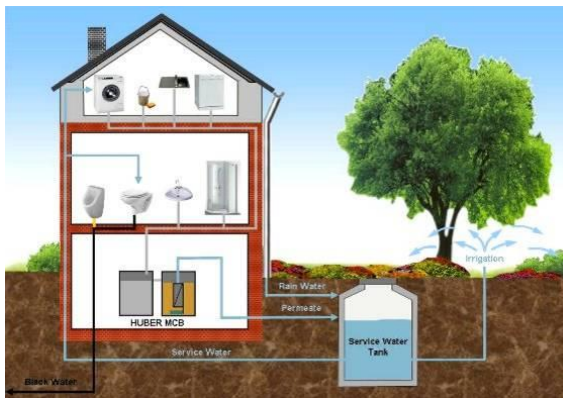


Figure 32: Grey Water Collection & Recycle Process

12.8.6.2 Grey water must not be used for purposes where it will come into contact with the human body. It must be treated appropriately to the desired standard.

12.8.6.3 To promote health and safety, all water features with a water storage volume of over 1,000liters and which create a water spray or aerosol including but not limited to waterfalls, ponds, streams etc., must be maintained, cleaned, disinfected and checked periodically to minimize the risk of Naegleria bacteria or germs contamination and not exceed the maximum limits outlined.

12.9 Waste: To promote recycling following may be considered:

12.9.1 Domestic kitchens must have a minimum storage facility of 2 (10 litres) waste receptacles clearly labelled ‘recyclable’ and ‘non-recyclable’.

12.9.2 All new apartment, office, educational and recreational buildings must have a garbage room with a minimum area of 7.5 m² (80.72 sq.ft) where non-recyclable and recyclable waste can be stored until collected. This facility must be easily accessible and sized as a percentage from the total Built up Area (BUA) of building in accordance with following Table.

Table 14: Minimum Requirement for Storage of Recyclables

Built Up Area (BUA)	Minimum Space for Storage of Recyclables
Less than 500 m ²	7.5m ²
500 m ²	1.5% of BUA
1,000 m ²	0.8% of BUA
5,000 m ²	0.35% of BUA
10,000 m ² or greater	0.25% of BUA

12.9.3 To Support waste management, for all new apartment, office, educational and recreational buildings, an area must be provided for occupants to place items of bulky waste such as furniture. The area provided must cover an area of approximately 10 m² (107.63 sq. ft.) and be reachable but not restrict access to the building.

12.10 Materials: To eliminate the use of hazardous materials:

12.10.1 All thermal and acoustical insulation must be installed as per the manufacturer's instructions.

12.10.2 To improve indoor air quality and protect occupants' health no paints and coatings used should exceed locally allowed limits of Volatile Organic Compound (VOC).

12.10.3 Paints, coatings, adhesive-bonding primers, adhesive primers, sealants and sealant primers may be accredited/certified from specialized laboratories.

Chapter XIII Submission of Building / Completion Plans

13.1 Notice for Erection/Re-erection of Building: Every person intending to erect, re-erect a building will engage an architect and structural engineer as applicable, for all types of buildings and will apply to PDOHA, after payment of prescribed fee and submit the plans, duly signed by the Owner and Architect/Engineer as per checklist.

13.1.1 Every person intending to carry out additions / alterations or demolish a building will engage an architect and structural engineer as applicable, for all types of building.

13.1.2 A registered professional, will give notice of undertaking for preparation of plans and supervision of building works. When the person so engaged ceases to be in charge of such building works before the same is completed, further such work be suspended, until a fresh appointment is made. A certificate duly signed by the previous professional, will be obtained by the owner and submitted to PDOHA to effect that the professional has ceased to be in charge of the work and that the work carried out under his supervision was to his entire satisfaction.

13.2 Oversight in Scrutiny of Drawings: Any oversight in the scrutiny of documents and drawings at the time of approval and sanction of the building plan or NOC does not entitle the owner to violate the Regulations.

13.3 Building Plan: Member will submit seven sets of architectural drawings of ammonia print and a soft copy along with application form. Building plan will be prepared to a scale not less than $1/8" = 1'-0"$ and the scale used will be indicated on plan with following details

13.3.1 The external dimensions of the main building.

13.3.2 Site plan/ key plan showing plot dimensions, width of the road(s), detail of neighbouring plots, location of gate(s), position of underground water tank, septic tank, grey water tank and location of North.

13.3.3 The basement, ground floor, upper floor(s), if any, and the roof.

13.3.4 The Numbering of all basements, shops, flats & offices in a commercial building.

13.3.5 Position and dimension of all projections beyond the building line.

13.3.6 The position and dimension of underground water tank, overhead water/ firefighting tank.

13.3.7 The position and dimension of septic tank and grey water tank.

13.3.8 Levels of COS for rain/storm water drainage

13.3.9 Positions and dimensions of surface/ rain water catchment and disposal arrangements (mechanical), in case of open basement.

13.3.10 The clear dimensions of all rooms and position of doors, windows and ventilators in each room at every floor/ level.

13.3.11 Total height of building with reference to reference point including level of finished floor, and split-levels (levels be indicated on plans also).

13.3.12 The material to be used in the foundation, walls, floors and roofs.

13.3.13 The purpose for which it is intended to use the building.

13.3.14 Roof plan showing the location, dimension and levels of overhead water tank, lift machine room, stair tower/mumty, generator pad, solar water heater, solar panel, water tap/connection, skylight openings, green roof details etc. The details should also be shown in the elevation and/ or section (where applicable).

13.3.15 Contour plan, if difference in level of plot varies more than 5'-0".

13.3.16 Every building plan submitted will bear the signature of the registered architect signifying its having been prepared under his supervision as per PDOHA Regulations.

13.3.17 Elevation and cross section of boundary wall, gate, ramp and water channel of 6" x 6" to be constructed along the main gate line with respect to adjoining road/street. This channel will be suitably connected with rainwater drains/ grey water tank.

13.3.18 Level and width of foundation and level of ground floor with reference to the level of the centre of the road/street on which the front of the proposed building is to abut.

13.3.19 Building corners on roadside will be chamfered properly as prescribed in Regulations.

13.3.20 Elevations from side(s) abutting roads.

13.3.21 Section(s) along x and y-axis passing through stairs, ducts and lifts providing maximum details.

13.3.22 Schedule of open/ covered areas.

13.3.23 Schedule of doors, windows and ventilators

13.3.24 Schedule of Stairs.

13.3.25 Covered areas and calculation of block plans.

13.3.26 Signature of Owner and the Registered Architect on drawings along with required forms.

13.3.27 All fresh/new proposed building plans will be prepared with standard colour. However, for proposed revised building plan, deviations and addition/alteration, distinct colours and key (legend) to the colour, will be given thereon as under: -

13.3.27.1 Existing work Black

13.3.27.2 Demolition Yellow

13.3.27.3 Proposed work Red

13.3.28 All Building plans, consisting of architectural and MEP drawings, prepared and signed by a registered architect and a registered engineer of PDOHA/ CBC.

13.3.29 Drawings must be as per architectural standards and text must be legible.

13.3.30 Drawings will be submitted on a sheet of 30" X 40".

13.3.31 All title documents relating to the plot showing the owner's right to carry out such works, will be accompanied with application as per checklist.

13.3.32 Any other information or document required by the PDOHA.

13.4 MEP drawings: The owner will submit the required drawings as per checklist and one soft copy (Auto-Cad Format)

13.5 Fire Fighting Drawings: To be submitted in accordance with chapter 16 of these regulations

13.6 Responsibility for Structural Stability: For any building constructed in PDOHA, the structural engineer will be responsible for stable design of the building. The contractor will be responsible for construction as per the design. Owner & contractor will be responsible for structural stability of the building. In case of structural failure, procedure laid under dangerous buildings will be followed.

13.7 Construction Period: After the receipt of an application for permission to carry out building works, PDOHA will arrange vetting of the plans as per category (fee charges). After approval, member can proceed

for demarcation. If the building plans are not according to the Regulations, then the same will be returned to owner for resubmission.

13.7.1 Construction will commence within one year and completed within two years from the date of approval. Construction period maybe extended maximum up to two years having each extension for one year.

13.8 Evidence of Permission: Wherever under any of these Regulations the doing of or omitting to do a thing or the validity of anything depends upon the sanction, permission, approval, direction, or satisfaction of the PDOHA. A written document signed by the Administrator PDOHA or a person duly authorized by him purporting to convey or set forth his sanction, permission approval, order, direction, requisition, notice or satisfaction will be sufficient prima facie evidence thereof.

13.9 Cancellation of Permission: If any time, after permission to carry out building work has been granted, the PDOHA finds that such permission was granted due to any defective title of applicant, material misrepresentation or fraudulent statement contained in application. In respect of such building, permission may be cancelled and work done, will be deemed to have been done without permission. Any oversight in approved building plan does not entitle the owner to violate the Regulations

13.10 Compliance of Conditions of Approval: Every person who carries out building works or demolition works will comply with the directions and conditions accompanying the sanction/ relevant Regulations of PDOHA.

13.11 Deviation in Building Plan: Construction activities will be executed as per approved building plan. However, if owner desires to make any changes during the construction, then deviation will be submitted for approval of PDOHA, prior to modification at site. Subsequent construction can proceed as per approved deviation. Construction other than approved building plan or deviation will be considered un-regularized until unless penalty is paid as per prescribed rates.

13.12 Revised Building Plan: Submission of revised building plan will be mandatory in the following conditions: -

13.12.1 Structural changes required during construction.

13.12.2 After approval of building plan, if changes / modifications are more than 40% of total constructed area. Deviation will not be accepted/ admissible in this regard.

13.12.3 After approval of completion plan, if changes / modification are more than 40% of total constructed area within allowable limits.

13.12.4 In case of time barred during construction.

13.12.5 In case owner fails to commence construction activity within one year from date of sanction of approval.

13.13 Works Executed Contrary to the Approved Building Plan: In case of any building works are commenced or carried out contrary to the approved building plan, PDOHA will:

13.13.1 Through a written notice, notify the owner, who is carrying out or have carried out, such building works, to stop all activities forthwith.

13.13.2 If the owner/such person fails to show sufficient cause to the satisfaction of the concerned Authority, why such building work or part thereof will not be removed or altered, the concerned Authority may take the following actions: -

13.13.2.1 Require the person who has carried out the works against the provisions of these Regulations/approved building plan or any other statute to demolish the whole building or part thereof.

13.13.2.2 In case of failure of the owner to demolish the unauthorized work, PDOHA will demolish such work at the risk and cost of the owner.

13.13.2.3 In case of non-compliance, the defaulting members are liable to disconnection of services, financial penalties, cancellation of membership and cancellation of the plot as deemed appropriate by the PDOHA.

13.14 Special Projects: The special projects will be governed by the agreement as approved by the Executive Board of PDOHA. The technical scrutiny, approval of the building and completion plan will remain the responsibility of Town Planning and Building Control Directorate.

13.14.1 The designed Regulations for the special projects may be altered/ changed by the Executive Board as and when such a need arises during the construction or even after the completion of the project.

13.15 Demarcation: Owner will apply for demarcation of his plot after approval of building plan by PDOHA/ CBC. Demarcation letter will be issued to the owner in person after survey of the site.

13.16 Boundary Pillar Check: Physical possession of plot for construction will be given after inspection of boundary pillars.

13.16.1 Members will arrange following items for demarcation on site at coordinated time: -

13.16.1.1 Four pieces of 4" diameter PVC pipe having length of 3'-0" along with required labour and concrete for erection of pillars.

13.16.1.2 Demarcation Pillars once erected will not be disturbed or removed until the construction of boundary wall up to DPC. In case of disturbance of pillars, demarcation will be done again.

13.17 Notice of Verification of Building Lines: Every person who commences any building work under these Regulations will give notice through the licensed architect to the PDOHA in writing on completion of plinth of the building and plinth of the boundary wall or foundation of the basement. In case of basement on prescribed Form and will not proceed further until verification certificate is obtained from PDOHA.

13.18 Inspection of Building at Various Construction Stages: Owner will get the work inspected and obtain a No Objection Certificate (NOC) at the following stages: -

13.18.1 Foundation at the stage of placement of reinforcement/ mesh prior to concreting at basement level

13.18.2 Plinth level

13.18.3 Ground floor slab level

13.18.4 First floor slab level

13.18.5 Second and every subsequent floor slab level if approved in building plan.

13.18.6 Stair tower level NOC of any building will be issued after the completion of finishing works.

13.18.7 Completion of lightning conductor's arrangements (where applicable for high-rise building).

13.19 Failure to obtain NOC: Owner will be liable to pay the penalty as per prevailing rates prescribed by the PDOHA.

13.20 Completion of the Building: The member will ensure completion of the residential / commercial building within three years from the date of approval of submission drawings. Any member not ensuring completion within three years will be liable to pay the late completion penalty as per prescribe rates. PDOHA may allow extension in time up to maximum one year meriting justified reasons, if applied by the owner, one month prior to date of completion. Another one-year extension may also be granted in extreme justified reasons and late completion penalty as per prescribed rates will be levied after this period as per prescribed rates.

13.20.1 For Buildings designed on FAR, owner will get the completion time of 3 years. Late completion penalty will be imposed after expiration of this period unless the owner obtains permission for extension.

13.21 Completion Plan: Every person who carries out and completes building works under these Regulations within 30 days of the completion of the entire work deliver to the PDOHA in writing on the prescribed Form as the case may be of such completion together with a certificate or certificates on the prescribed Form duly signed by the registered architect, etc., engaged under these Regulations together with the certificates as mentioned in Regulations and documents as per checklist.

13.21.1 No person will occupy any such building or use any part affected by the erection or re-erection of such building until a 30-day notice of completion is given to the PDOHA and the permission under these regulations has been granted by the PDOHA.

13.21.2 After the receipt of the notice of completion PDOHA will arrange to inspect such work and after such inspection either approve or disapprove or regularize minor deviations with penalty, at the rates approved by the Executive Board from time to time.

13.22 Revised Completion Plan: Revised completion plan will be submitted after execution of approved revised building plan.

13.23 Addition, Alteration and Renovation of Building after Approval of Completion Plan and Execution of 'B' & 'C' Lease: Any such addition, alteration and renovation, which conform to PDOHA Regulations, may be done to building after obtaining approval for proposed works from PDOHA by submitting documents as per checklist.

13.23.1 Failing to get approval of addition and alterations on proper completion plan and undertaking such additions and alterations without prior approval of PDOHA, the unauthorized construction will be demolished at the risk and cost of the owner.

Chapter XIV Administrative Aspects

14.1 Commercial Activity: Commercial activity of any type is not allowed in the residential area.

14.1.1 Wood, mine coal and rubber material etc is not allowed to be used as fuel.

14.1.2 Industrial and semi industrial activities are not allowed except where specified.

14.2 Clubs /Guest Houses: Residential and Commercial area/ building cannot be used / rented as Clubs, Guest House, Guest Room or Hostel etc

14.3 Utilization of Vacant Plots: Vacant plots/open area cannot be used for any function/gatherings without permission of PDOHA.

14.4 Display of Fire Works and Arms: Display of fireworks and use of arms are strictly prohibited in PDOHA.

14.5 Distinctive Marking / Flags: Flags / Banners showing Political / Religious / Sectarian affiliations are not allowed on both residential and commercial buildings in PDOHA.

14.6 Grave Yard: Burial in PDOHA grave yard will only be carried out after formal approval and procedures from PDOHA/ CBC.

14.7 Security Check Post/Tower: No check post/tent/cabin/barriers will be allowed outside property line.

14.8 Hazardous Materials / Chemicals: Storage of any kind of hazardous materials / chemicals/explosives in any building is strictly prohibited.

Chapter XV Safety and Security Measures during Construction

15.1 Site Hoardings: No member will start construction of building work on a site abutting on a street without having first arranged hoarding or barriers to the satisfaction of the PDOHA along the peripheral length of such site to prevent danger/injury/mishap to the public or the persons employed at the site. However, that these regulations do not apply in the case of building works in connection with structures situated at least 15'-0" away from a public street and being not more than 25'-0" in height.

15.2 Neighbours Safety: If plot is excavated for the foundation, it is essential for the owner to ensure that adequate safety measures are taken against possible damage to neighbouring compound walls, foundations and structures etc. A safety distance of 5'-0" is to be left while excavating the basement(s) with neighbouring plots with no basement. The owner of under constructed property who started excavation for basement will make any damage occurring due to excavation good. PDOHA will issue stop work notice if the owner fails to take remedial action.

15.3 Stability of Adjacent Building: No excavation, dewatering, earthwork or demolition of a building which is likely to affect the failure of adjacent building will be started or continued unless adequate steps are taken before and during the work to prevent the collapse or damage of any adjacent building or the fall or any part of it.

15.4 Filling of Excavated Site: A site once excavated will not be kept open and idle for a period beyond the validity period of building plan failing which PDOHA will not revalidate the plan and in case of any mishaps, the owner will be responsible for life and property of the affectees. Excavated site will be filled in by PDOHA at the risk and cost of owner, if needed.

15.5 Use of Public Streets: No part of any street will be used in connection with the construction, repair or demolition of any building except with the written permission of the PDOHA. Any person holding such permission will put up and maintain to the satisfaction of the PDOHA,

fences of barriers in order to separate the building work from such street. Where such separation is not possible member will make arrangement for the security of public to the satisfaction of PDOHA.

15.6 Caution Lights/ Flags: Any person causing any building material or other things to be deposited, any excavation to be made or any hoarding to be erected will at his own expense cause sufficient and adequate red lights to be fixed upon or near the same while such materials, hoardings, things or excavation remain. In addition to above, red flags of reflective material will be provided during daytime.

15.7 Utility Services not to be Obstructed: All materials, hoarding, fences or other obstructions on any street will be kept clear of any fire hydrants of any other utility services. Installation or alternative arrangements will be made and precautions will be taken according to the laid down procedure of the utility agencies and to the satisfaction of the PDOHA to divert and to keep clear of obstruction of any roadside or other drain during the period of temporary obstruction.

15.8 Removal of Obstruction after Completion of Works: All obstructions will be removed within seven days of the completion of the construction work and the street and all drains and public utility installation made clean, tidy and serviceable conditions.

15.9 Dangerous Obstruction: If any material, hoarding, excavation or any other thing near or on any street will be in the opinion of the PDOHA dangerous to the passers-by along such street, the PDOHA will cause the same to be removed, protected or enclosed so as to prevent danger there from. PDOHA will be entitled to recover the expenses thereof from the owner of such materials or from the person who made such hoarding, excavation or other thing to become dangerous.

15.10 Adequate Safety Measures: The Owner & Contractor take adequate safety measures will where necessary be provided and used to protect any person from falling on earth, rock, other material or adjacent to any excavation or earthwork.

15.10.1 Material will not be placed or stocked near the edge of any excavation so as to endanger persons working below.

15.10.2 Load will not be placed or moved near the edge or any excavation where it is likely to cause a collapse of the side of excavation and to endanger any person.

15.10.3 Measures to be taken to prevent vehicles/ machineries from over-running and falling into the excavation or causing collapse of any side of the excavation.

15.10.4 In all buildings of greater than 20'-0" height temporary rails, scaffolding or barriers will be installed during construction at the edge of slabs and around all openings such as lift or stairwell, etc.

15.11 Supervision of Demolition Work: The demolition of a building and the operations incidental thereto will only be carried out under the direct supervision of a professional.

15.12 Safe Loading: Roof/ floor or other part of the building will not be overloaded during demolition and construction with debris or materials as to render it unsafe.

15.13 Scaffolds: Suitable and sufficient scaffolds will be provided for all work that cannot safely be done from the ground or from part of the building or, from a ladder or other available means. Support and sufficient safe means of access will be provided to every place at which any person has to work at any time.

15.13.1 Every scaffold and means of access and every part thereof will be adequately fabricated with suitable and sound material and of required strength to ensure safety. All scaffolds, working platforms, gangways, runs and stairs will be maintained to ensure safety and security.

15.13.2 All vertical members of scaffolds on ground level facing roadside should be adequately wrapped with spongy material up to a height of at least 7'-0". Any horizontal member if used, up to a height of 7'-0" from ground, should be wrapped all along its length with such material.

15.14 Roadside and Neighbouring Property Protection: Protective covering of suitable material will be fixed/ installed in residential /commercial buildings during the period of construction for protection/ adequate safety of neighbouring buildings and general public/ passer-by. This provision is mandatory for buildings (under construction) surrounded by already constructed property, however optional for buildings (under construction) with open spaces.

15.14.1 Adequate provision of safe passage for pedestrian will be provided, in case the scaffolding covers part of the road or footpath.

15.15 Working Platform: Every working platform, which is more than 7'-0" height from which a person is liable to fall, will be at least 2'-0" wide provided the platform is used as a working platform only and not for the deposit of any material.

15.15.1 A clear passageway at least one and half foot wide will be left between one side of any working platform and any fixed obstruction or deposited materials.

15.16 Guard Rails: Every side of a working platform height, gangway and stair will be provided with a suitable guardrail of adequate strength, up to at least one meter above the platform, gangway or steps.

15.17 Ladders: Every ladder will be of good construction, sound material and adequate strength for the purpose for which it is used. Ladder will be securely fixed when in use and will not have any missing/ defective rungs.

15.18 Work on Sloping Roofs: Where work is to be done on the sloping surface of a roof, suitable precautions will be taken to prevent persons employed from falling off.

15.18.1 Suitable and sufficient ladders or wooden planks, securely supported, will be provided and used to avoid concentration of loads, leading to unsafe condition.

15.18.2 Persons employed in a position below the edge of sloping roof and where they are in position of being endangered by work done on the roof, proper protection will be taken to prevent tools or materials falling from such roofs so as to endanger such persons or passers-by.

15.19 Precautions for Raising and Lowering Loads: For raising or lowering loads or for suspending those by hand or power operation, every precaution will be observed to ensure safety of human and materials on the construction site, some are mentioned below: -

15.19.1 No broken wire rope will be used.

15.19.2 No chain will be used which has been shortened or jointed to another chain by means of bolts and nuts.

15.19.3 No chain or wire rope will be used which has a knot tied in any part which is under direct tension.

15.19.4 Safe and efficient devices to prevent the displacement of the sling or load from the hook; or of such shape as to reduce the risk of such displacement, will be used.

15.19.5 All debris and waste material during construction will be disposed of through well designed chutes from each level of under construction building of height over ground plus two floors or more.

15.19.6 The vertical hoist platform used will be enclosed or protected by proper barrier. Every opening of lift, shaft or other such vertical voids or openings in slab, etc., where a person is likely to fall will be protected by safety barrier and properly lit. Any area including basement, where natural light is not available or which is dark will be so illuminated as to eliminate any risk of life or hazard to users.

Chapter XVI Fire Safety Precautions

16.1 General: All requirements as provided in Building Code of Pakistan- Fire Safety Provision 2016 are to be followed apart from other requirements / modifications as provided here in.

16.2 Firefighting/ Exit Plan: Complete firefighting/ fire exit plan/ drawings will be submitted for approval of PDOHA prior to construction.

16.3 Minimum Requirements for Fire and Safety Precautions:

16.3.1 Commercial/ Amenity Plots Up to 400 sq. yd.:

16.3.1.1 Heat detectors to be provided in all kitchens.

16.3.1.2 Two portable fire extinguishers (dry chemical powder and CO2) are to be provided on each floor's corridor/ staircase.

16.3.1.3 One fire blanket on each floor's corridor/ staircase.

16.3.1.4 Exit signage on each floor's staircase.

16.3.1.5 Emergency light on each floor's corridor/ staircase.

16.3.1.6 Standpipe equipment/ dry riser as defined in this chapter.

16.3.2 For Commercial Plots above 400 sq. yd., follow all requirements as given in the Building Code of Pakistan - Fire Safety Provision 2016

16.3.3 Residential Plots: Provide minimum one portable fire extinguisher on each floor.

16.4 Portable Fire Extinguishing in Commercial and Public Buildings: These will be provided as under: -

16.4.1 Two extinguishers in stage area, one in each dressing room and one immediately outside each entry in theatres.

16.4.2 One extinguisher in each 2500 sq. ft. of area of public assembly buildings, but minimum one on each occupied floor, and minimum one in each lab, workshop or vocational room.

16.4.3 At least one extinguisher on each floor at stairway landing and in corridor at each lift or group of lifts.

16.4.4 Strict adherence of firefighting, fire prevention, fire escape and fire alarm code will be required which includes but not limited to provision in each building, facilities like fire exits & fire stairs, heat & smoke detectors,

fire hose reels, dry riser, firefighting & fire alarm systems, fire rated doors, etc. all as per Building Code of Pakistan – Fire Safety Provisions 2016.

16.5 Fire Escapes/ Emergency Staircase: At least 2 emergency staircases are required to be provided in for plots sizes of 401 sq yd and above. Any of the fire staircases will be used as main staircase. For plots above 600 sq yd staircases will be provided as required in Building Code of Pakistan – Fire Safety Provisions – 2016.

16.5.1 Emergency Staircase will be designed with Fire Rated Doors (1 ½ hours rated), Fire resistance rated door or commonly known as fire door is mandatory to be provided within 2 hours rated walls (in case of enclosed fire escape). It will exit towards open space on ground floor.

16.5.2 At Least one emergency staircase will be located within 100 rft of any point on a floor for building larger than 600 Sq. yd.

16.6 Stand Pipe Equipment: For the purpose of prevention and fire extinguishments, every multi-storeyed building will be equipped with stand pipes as under:

16.6.1.1 From four to eight storeys in height will be equipped with not less than 2.5" dia pipes;

16.6.1.2 Over eight storeys be equipped with minimum 4" dia standpipes.

16.6.2 The number of standpipes will be such that all parts of every floor area are at a maximum distance of 120'-0" from the standpoint.

16.6.3 As practicable, standpipes will be located with outlets within stairway enclosures, but if these are not available, the standpipes will be located in a common corridor. In any case, one will be located in the main.

16.6.4 The standpipes will be galvanized iron/gun metal.

16.6.5 Standpipe risers will extend from the lowest to the top most storey of the building or part of building, which they serve.

16.6.6 When more than one standpipe is required, pipes equal in size to that of the largest riser will interconnect them at their bases.

16.6.7 Every standpipe or stand-system in case of interconnected standpipes, will be equipped with corrosion resistant metal (e.g. gunmetal) located on an outer building face nearest to street approximately 20'-0" to 30'-0" above finished ground and suitably marked "fire department connection-standpipe."

16.6.8 Standpipes will be provided in every storey with a 1.5” dia flexible hose not less than 100’-0” long, with a 0.5” nozzle, being in cabinet or architrave.

16.6.9 The standpipes will be fed by an overhead water tank reserve solely for this purpose. The minimum capacity of this tank will not be less than ¼ capacity of OHWT.

16.7 Dry Riser: For each commercial building, 58’-0” tall, a dry riser (supply system intended to distribute water to multiple levels or compartments of a building, as a component of its firefighting systems) will be provided to ensure that firstly a fixed distribution system within the building is provided that requires no fire service resources or equipment. Secondly, to maintain the compartmentalization of the building.

16.7.1 Dry risers are a building Regulations requirement in occupied buildings over 58’-0” tall. The designers or architects may opt for the superior protection of wet risers (pressurised pipes). Wet risers are a building Regulations requirement in buildings over 164’-0”. Dry risers may also be found in environments where access is limited or compartmentalization is an issue i.e. multilevel basement, car parks or hospital corridors etc.

16.7.2 Dry riser will consist of three components to meet requirements of Building Code of Pakistan – Fire Safety Provisions 2016.

16.8 External Inlets: Inlets enable connection of fire service water supplies will be required with an external cabinet or enclosure marked “DRY RISER INLET”. Within this enclosure, a collecting head with at least two BS Instantaneous male couplings will be provided. In this cabinet, a drain down valve to enable the dry riser to be emptied of water following fire service operations or testing will also be provided. These enclosures should be secure from vandalism but designed for immediate accessibility with a breakable area in the door to facilitate urgent fire service connection.

16.9 Pipe Work: All required pipe work would be functional by ensuring that the pipes are maintained EMPTY of water. The designer should ensure that the pipe work of dry riser distribution systems is of Galvanized steel pipe based on British standards laid down requirements for the pipes

internal diameters or equivalent National Fire Protection Association (NFPA) requirements.

16.9.1 In buildings over 58'-0" provide single outlets on each floor (100 mm or 4" internal diameter pipe work fitted). For taller buildings and for situations where multiple outlets on floors are required, 150mm or 6" internal pipe work is fitted. Where larger diameter dry riser pipe work is required, the same should be accompanied by a 4-way inlet collecting head. The pipe work is usually enclosed with fire resistant enclosures or shafts.

16.9.2 The top of the pipe work should be provided with vent pipe to allow the air in the dry riser to be expelled when it is charged with water.

16.10 Outlet Points: Outlets (Landing Valves) - the connection points for enabling the fire service, are to be attached and advance its hose lines within a building. Each outlet should consist of a single or double BS instantaneous female outlet, under the control of a gate valve. Also, outlets should be protected by enclosures with a breakable area in the door to facilitate urgent Fire Service connection. Outlets are to be situated in a protected lobby, stairway or cupboard, one of a buildings fire escape staircases, enclosures or lobbies. Provision is to be made at roof level for an additional "testing" outlet, where possible.

16.11 Automatic Sprinkler System: Will be provided in: -

16.11.1 Every public use / institutional buildings like NADRA, Utility offices, Police stations, Schools etc., which serves restrained or handicapped persons and commercial buildings on FAR.

16.11.2 Covered car-parking areas in building of which upper storeys are designed for other uses when such parking area exceeds 5000 sq. ft.

16.11.3 Each floor of mercantile and industrial buildings which is more than one storey high and which exceed 2000 sq. ft. covered area

16.11.4 All areas of theatre except auditorium, music hall and lobbies.

16.11.5 All building areas used primarily for storage of goods, and materials including areas clearly specified for storage of incombustible materials and goods, which are more than 1000 sq. ft. in area.

16.11.6 Sprinkler provision will be made in the immediate vicinity of generators or any electrical equipment.

16.11.7 For all generators or any electrical, Information and Communications Technology (ICT) equipment FM-200 (Clean Agent and IFC 227 ea system) or any other clean, colourless and environment friendly fire suppression agent that is electrically non-conductive and safe for humans is allowed.

16.12 Construction of Sprinkler System: Sprinkler pipes, hangers and sprinkler heads will be protected from corrosion.

16.12.1 Every sprinkler system will be equipped with a fire department inlet connection located on an outer building face nearest to street approximately 20'-0" to 30'-0" above finished ground and suitably marked "Fire department Connection-Automatic sprinklers".

16.12.2 Automatic sprinkler system from the incoming supply along with automatic fire booster pump will be connected to a building's RCC water storage tanks. This tank will be of enough capacity to meet the daily storage requirements of the building's occupancy along with the minimum water storage requirement as recommended by Building Code of Pakistan – Fire Safety Provisions 2016. There will be minimum pressure (3 bars or 20 PSI) above the highest discharge point according to Building Code of Pakistan – Fire Safety Provisions 2016.

16.12.3 Automatic sprinkler system will set off automatic alarm system simultaneously.

16.12.4 Every sprinkler system will be provided with a readily accessible outlet valve to control all sources of water supply.

16.13 Interior fire alarm system and signal stations. Interior fire alarm system will be installed in all: -

16.13.1 Hotels, motels, dormitories and similar buildings with a capacity of 50 or more occupants above the ground level;

16.13.2 Hospitals, asylums, nursing houses, and similar institutional buildings accommodating more than 20 occupants above the ground floor;

16.13.3 School buildings, with provision of more than 30 students above the ground floor;

16.13.4 Mercantile buildings with more than 2000 sq. ft. above the first floor;

16.13.5 Factory buildings exceeding 2 storeys in height and with more than 4000 sq. ft. area above the first floor;

16.13.6 Office buildings more than 5 storeys in height and with occupancy area of more than 10000 sq. ft. above the ground floor.

16.13.7 Cinemas, theatres and similar places of public assembly.

16.13.8 At least one signal station will be located in each storey in accessible location in the natural depth of exit way or escape.

16.13.9 Every signal station will be so located that no point on any floor or the building is more than 50 meter from such station

Chapter XVII Violations of Regulations

17.1 Removal or Prevention of Violation: PDOHA will take appropriate measures to ensure compliance of these Regulations. PDOHA will carry out inspections of any Residential, Commercial and Amenity building premises. Inspections will be arranged, on occasional, on any observation, or on any complaint from the neighbourhood, basis. Owner/Occupant of the property will arrange the inspection of the premises by PDOHA detailed inspection team. Inspection of premises may be asked through writing (notice), verbal or telephonic correspondence. However, owner will verify the identification of PDOHA inspection team before entry to the premises. Representative of the owner/occupant will accompany the PDOHA Inspection Team.

17.1.1 If PDOHA finds that any of the provisions of these Regulations, or any rules relating thereto, or any conditions of a general or special permit, are being or have been violated, it will serve a notice in writing to any person responsible for the violation.

17.1.2 The notice will indicate the nature of the violation and PDOHA may order such action as it may deem appropriate to correct the violation including but not limited to: -

17.1.2.1 Discontinuance of any illegal work being done on, or activities being conducted in relation to, building.

17.1.2.2 Requiring the owner or builder who are carrying out or have carried out such building works, on or before such day as will be specified in such notice, by a statement in writing subscribed by him or by a person duly authorized by him and addressed to PDOHA, to show sufficient cause why such building works or such part thereof will not be removed or altered to comply with these Regulations.

17.1.2.3 If such person fails to show sufficient cause to the satisfaction of PDOHA why such building works or part thereof will not be removed or altered. PDOHA may take following actions:

17.1.2.3.1 Require the person who has carried out the works against the provisions of these Regulations to alter or cessation of the whole or part of construction works thereof.

17.1.2.3.2 Any other measures authorized by these Regulations, or with the conditions of permit.

17.1.3 The order will specify the period within which the violation will be corrected and in the event of non-compliance with the order, PDOHA may take appropriate measures under the relevant Regulations to be taken to effect compliance. The expenses will be recoverable from the owner in the manner provided for the recovery of arrears of revenues or taxes.

17.1.4 The giving of notice and making and serving of an order under this clause will not be a prerequisite to the initiation of, and will not bar, any prosecution under any applicable law, and PDOHA may take action under this clause whether or not a prosecution has been initiated.

17.2 Enforcement by PDOHA: Administrator/Secretary PDOHA may direct the concerned officer (under whose jurisdiction violations have occurred) to take action under these Regulations with respect to any violation including entering upon and sealing of premises in coordination with CBC magistrate.

17.3 Appeals: Within thirty days from the date of receipt of any order of PDOHA under these Regulations or of its determination on an appeal under the preceding sub-Regulations, the aggrieved person so served may appeal to the Administrator, which may give him an opportunity to be heard, if deemed appropriate or worth hearing, and within reasonable time.

17.3.1 Administrator may arrange hearing of the person by himself or depute an officer for the purpose. The deputed officer or officers will report, may be written or verbal, along with recommendations to Administrator.

17.3.2 PDOHA after considering a report and any recommendations of the hearing officer, may affirm, modify or amend the order or determination.

17.4 Finality of Orders or Determination: Unless an appeal has been admitted as provided by Regulations, an original or appellate order or determination of the Administrator will be final.

Chapter XVIII Change of Land Use

18.1 Amenity Plots: Utilize no amenity plot reserved for the specific purpose for any other purpose, unless approved by the Executive Board.

18.2 Residential Plots: No residential plot will be utilized for any other use except with the approval of the Executive Board, under special circumstances.

18.2.1 The applicant will apply for change in land use with full justification and pay necessary dues to PDOHA.

18.2.2 PDOHA will give due consideration to the objections from the public before the final decision.

18.2.3 Final NOC of change of land use will be issued by the PDOHA.

18.3 Commercialization of Plots: Conversion of residential plots into commercial will be allowed only according to a uniform commercialization policy formulated and revised from time to time with the approval of the Executive Board through notification. A comprehensive study of various urban areas required for commercialization will be conducted before suggesting the change in land use. Individual plots will not be considered for commercialization. Additional Development charges will be levied.

Chapter XIX Dangerous Buildings

19.1 General: All such buildings or structures which are declared as dangerous by the following evaluation committee will fall in two categories:

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- a. President (1) Director TP&BC
- b. Members (2) Additional Director TP&BC
(3) Additional Director Legal
(4) Structural Engineer duly registered with PEC & CBC (to be nominated by CBC)
(5) Representative of CBC

19.1.1 Category – 1: Any building or structure whose strength stability, serviceability, robustness or durability has been impaired due to any reason such as improper structural design and detailing, faulty or poor construction, decay, dilapidation, obsolescence, natural disasters or leading to abandonment due to all these reasons to a level, where it cannot be restored to its original status, will classify as “Dangerous Building Category-1”, and will be liable to be demolished.

19.1.2 Category – 2: Any building or structure or part thereof whose strength, stability, robustness, serviceability or durability has been impaired due to all such reasons as cited in paragraph 19.1.1, where it could by way of strengthening, appraisal and restoration be brought partially or wholly near to its original status, will be classified as “Dangerous Building Category-2”.

19.2 Notices for Dangerous Buildings: If in the opinion of evaluation committee, a building or part thereof has become dangerous for human habitation, the evaluation committee will give at least twenty-four hour’s notice to the owner or occupants (who need not to be named) for inspection of such buildings by the technical representative of the evaluation committee.

19.2.1 In case the evaluation committee considers a building or a part thereof, repairable or modifiable without causing danger to human life or property, it may issue such orders to the owner, occupant or tenant of such building in this regard.

19.2.2 If the evaluation committee finds such building dangerous, ruinous or unsafe after proper inspection and investigation by technical representative, the PDOHA will serve to the owner of such building or structure, a written notice stating the defects thereof, and will require the owner or person in-charge of the building or premises to commence either the required repairs or improvements, or demolition and removal of the building or structural portion thereof as the case may be, and all such works will be commenced or completed within the period specified by the evaluation committee.

19.3 Buildings Unfit for Human Habitation and Notice of Prohibition:

If for any reason it will appear to the evaluation committee that any building or part thereof intended or used for human habitation or human occupation for any purpose whatsoever is unfit for such uses, it will signify its intention to prohibit the further use of such building or part of a building and call upon the owner or occupiers or tenants to state in writing their objections (if any), to such prohibition within fifteen days after the receipt of such notice. If such owner or occupier raises no objection within the prescribed period or if any objection, which is raised, appears to the evaluation committee to be invalid or insufficient, the evaluation committee may prohibit by an order in writing, the further use of such building or part thereof. The owner or occupier of the building will be given an opportunity of appearing before the president of evaluation committee in person or by an agent in support of his objection, if he/she so desires. A public notice to this effect will be published by PDOHA in leading Urdu and English daily newspapers.

19.3.1 A 30 day notice of such prohibition will be served in person or by any courier service, mail, or by pasting at site in the presence of authorized officer by the evaluation committee, before which every such person will remove himself and his property from the said building or part thereof; failing compliance the evaluation committee may cause him/her and his/her property to be removed at his/her own risk and cost. In case of imminent danger 24 hours' notice may be issued by the evaluation committee.

19.3.2 When a building or part of a building has been vacated under clause 19.2.2 the owner will display at each entrance at prominent places to such building a notice to read "DO NOT ENTER, UNSAFE TO

OCCUPY” in English and Urdu. Such notice will remain displayed until the required repairs, demolition, or removals are completed.

19.4 Alteration, Modification or Repairs of Dangerous Buildings: At any time after a building or part of a building has been vacated under clause 19.3.2, if the evaluation committee considers that it can be rendered fit for human habitation by the structural alterations, repairs or modification and updates or repairs before or after the vacation of habitants from such buildings, the evaluation committee may by notice in writing, call upon the owner to commence through professional within such time as may be specified (but not less than thirty days) and to complete within the period as specified in the notice but not more than ninety days from the date of receipt of such notice, such structural alterations, modifications, up-dates or repairs, as deemed necessary. If within the aforesaid period such alterations, modifications, updates or repairs have not been completed to the satisfaction and redoing as per good engineering practices and quality, of evaluation committee, it will issue to the said owner a notice in writing ordering the demolition within thirty days from the date of receipt of such notice. In case of noncompliance and safety of habitants is compromised, PDOHA may order complete vacation of Building and then proceed with demolition at risk and cost of the owner.

19.4.1 If the evaluation committee considers it impracticable to render such building or part thereof fit for human habitation, PDOHA will issue a notice to the owner with info to CBC to demolish the building within a specified period.

19.5 Demolition of Dangerous Building on Expiration of Notice Period: On expiration of period specified in notice and order to demolish a building or part of a building, PDOHA and CBC will jointly exercise their powers under their Regulations, to vacate/ demolish any such building.

19.6 Extension of Period for Repairable Buildings: For sufficient causes, the evaluation committee may extend the time.

19.7 Evacuation of Dangerous Buildings: If in the opinion of the PDOHA, any building, wall, or structure or anything affixed thereto is in hazardous or dangerous state, PDOHA may by notice in writing, require

the owner or occupier thereof forthwith either to remove the same or to cause such repairs to be made thereto as the PDOHA considers necessary for the public safety, and if the danger appears to be imminent, the PDOHA may forthwith take such steps as may be required to avert such danger, including the evacuation without notice from such building of all the occupiers thereof.

19.7.1 Expenses incurred by PDOHA will be paid by the owner concerned.

19.7.2 When the owner of any building, wall, structure or anything affixed thereto fails to execute the repairs required from him by PDOHA, the tenant or occupant of such building, wall, structure or anything affixed thereto may, with the previous approval of the PDOHA, carry out such repairs.

19.7.3 Except with the permission in writing from PDOHA, no person will enter into or remain in any building from which the tenant or occupant has been removed.

Chapter XX Public Sale Projects

20.1 No Objection Certificate: The owner/builder of commercial/multi-storeyed buildings, to be constructed, for onward sale/rent is required to obtain NOC from PDOHA in accordance with these Regulations. The sale of building/project may be through sale deed, as a whole or piece meal or transfer of the title in the form of sub lease, etc. The rent of project may be through rental agreement, as a whole or piece meal. All formalities with respect to public sale projects will be completed and submitted before issuance of NOC at plinth level.

20.2 Application for NOC: A builder applying for NOC to PDOHA will furnish the requisite documents and particulars in Prescribed Form 10 as appended to these Regulations, duly signed by all concerned as mentioned

20.3 Undertaking of the Builder with their Professionals: The builder and his/her architect and engineer will submit the undertaking on the Prescribed Form. The undertaking of the builder, architect and engineer will be on a stamp paper in accordance with format specified in Form.

20.4 Determination of Price and Cost Estimates: A builder will submit the selling price of various units for registration purposes with required details, specifications and work programme for the project as specified in the Prescribed Form. This price will be quoted in all the advertisement and promotion literature published by the builder. No escalation in the cost will be allowed except where inflation (as defined by the Ministry of Finance) is above double digits for particular year; in such case excess over the double digits will be the percentage of price increase. In this case the builder will inform the PDOHA along with relevant inflation figure in writing along with supporting documents and get the approval of PDOHA. No escalation will be granted to the builder who has failed to complete the project in time.

20.5 Processing Fee for Obtaining NOC: A builder will pay prescribed fee (processing fee) to PDOHA for obtaining the "NO OBJECTION CERTIFICATE (NOC)" to publish a notice by him/her in the newspaper, print media or electronic media, defining the salient features of the public sale/rent project. The salient features will include name of project, address,

builder, office address, architect and engineers, number of floors, number and sizes of shops, flats, offices, COS, date of completion, and draft sale/rent agreement, etc) within seven days of issuance of “NOC for Sale.”

20.6 Security Deposit: The builder will deposit cash security equivalent to 1 % of the cost of construction of the project with the PDOHA to be held in an account which will be recovered in advance from owner or builder before issue of approval of NOC for sale. In addition, in case of delay in completion of the project, where such delay has not been condoned as per clause 20.18, deduction from the security will be made in proportion to the extent of the delay.

20.6.1 Security deposit amount will be refunded on the expiry of one-year maintenance period and will be accordingly enunciated in the NOC granted by the PDOHA. Maintenance period of the building will start from the date of the approval of completion plan, submitted by the owner or authorized person on his/her behalf. Successful completion of the project, approval of completion plan and occupancy certificate are pre-requisite for refund of the security deposit.

20.6.2 PDOHA will have the right to utilize the security deposit to rectify any fault or defect in the construction of the building after receiving complaints or notice and if the builder fails to rectify the same by himself or violation of any condition of the NOC granted by the PDOHA that come to light at the time of the completion of the project or in case the builder fails to comply with any of the following: -

20.6.2.1 To construct the building in accordance with the design specifications agreed with the purchaser and approved by PDOHA.

20.6.2.2 Complete the building on time as per agreement with purchaser.

20.6.2.3 To provide services as per agreement with purchaser.

20.6.2.4 To obtain Occupancy Certificate from PDOHA.

20.6.2.5 If builder is found involved in any unlawful activities in the project.

20.6.2.6 To rectify defects after occupation provided the builder is at fault.

20.6.3 Any such defect or violation will have to be made good by the builder at his own cost and risk and the cash security deposit, will not absolve the builder of his responsibility to the project as per condition of NOC.

20.6.4 This security deposit will not, in any way prejudice the PDOHA's rights under these Regulations to initiate any other proceedings or action in the event or violation of any of these Regulations.

20.6.5 The deposit will be released to the builder after one year of obtaining Occupancy Certificate but after meeting all builder's liabilities as cleared by the PDOHA.

20.7 Application Form for Allotment: After the receipt of NOC from the PDOHA, the builder will get filled an application form from a person intending to book a unit in the project.

20.8 Execution of Sub-Lease: A unit will be offered for sale on cash or cash-cum-loan basis as per schedule of payment. Sub-lease will be executed as per sale and allotment conditions, in favour of allottee, before delivering the possession of the unit. The allottee will own the building structure of his unit and will proportionately share the price or rent of land of the unit with other allottees of the project.

20.9 Confirmation of Allotment: Builder through an allotment letter to the allottees will confirm allocation of the unit, within 15 days of booking. The allotment letter will specify the unit number, floor, floor area of the unit, general facilities, fittings and fixtures with their make and material, the total price of the unit and details of other charges together with the key plan of unit in line with key plan approved by the PDOHA at the time of NOC.

20.10 Agreement with Allottee: Within fifteen days of the issuance of allotment letter and before calling other instalments in respect of the unit, the builder will execute an agreement with the allottees.

20.11 Payment of Instalment: The payment of instalment will be made by the allottee strictly according to the schedule of payment. In case of failure a fifteen-day notice will be issued through registered courier service on the last given address and if the allottee fails to make payment within the above period another notice will be issued by the builder up to another thirty days. In case of further failure, a cancellation letter will be issued to the allottee and a copy of which will be endorsed to PDOHA. The builder will not rebook the cancelled unit within thirty days of receipt of copy of

cancellation letter by PDOHA. Provided that builder will publish the cancellation notice in the two leading newspapers (English and Urdu) under the heading of cancellation of flat or unit.

20.11.1 In response to the above cancellation notice, if the allottee intends to continue the booking, the builder will restore the allotment, after receipt of pending payment and charging the mark up on the prevailing bank rate for the period of delay on unpaid instalments.

20.11.2 If no response to the PDOHA is received from the allottee during the said period, the cancellation of the unit will be confirmed automatically. In case the cancellation is made before allocation, the builder will refund the total amount paid till that time by the allottee within thirty days. However, after allotment of unit, the builder will retain 4 % of the amount paid that far, and the rest of the amount will be refunded within thirty days.

20.11.3 In spite of failure to make payment of instalments in time, if the builder does not resort to cancellation as provided in these Regulations, the builder may or may not charge mark up at the prevailing bank rate on the unpaid instalments and the allottee will be informed accordingly.

20.12 Loan Component: The builder may arrange the availability of loan, if the project contains a loan component. If loan is refused or reduced due to any reason whatsoever by the loan giving agency, the allottee will pay the loan amount from his own resources. However, extra time of at least six months will be given to allottee to pay the loan component to the builder.

20.12.1 The allottee must complete all documentation for lease and loan within one hundred and twenty days of booking as written in the agreement and the builder will issue a reminder. The repayment of the loan instalments will be made by the allottee or borrower to the loaning agency as and when it falls due as per rules of the relevant agency. The allottee or borrower will abide by the arrangements of loan, will follow rules, Regulations, orders and instructions of the loaning agency.

20.13 Documentation and Connection and Meter Charges: Documentation charges for sub-lease and loan, and external services connection charges for gas, electricity, sewerage and water will be paid in proportion to the unit area in accordance with the actual payment made to these agencies plus 15 % as service charges for their respective services.

This amount should be paid at the time of deposit of challan. In case any allottee fails to make this payment he will pay mark up on the amount at the prevailing bank rate.

20.14 Minor Changes: The builder will construct the building strictly according to the approved building plans. However, minor changes, if any, within the unit may be made by mutual arrangement between builder and allottee provided that these do not contravene these Regulations and such changes do not affect the structural stability of the building and do not usurp the right of the other allottees.

20.15 Clearance of Dues for Execution of Sub-Lease: The sub-lease of the unit will be executed in favour of the allottee before handing over the possession of the unit, provided the allottee has made payment of outstanding amount up to that time.

20.16 Timely Completion of the Project: The builder will maintain steady progress of work irrespective of the situation of payment by the individual allottees and availability of loan by the loan-giving agency. The builder will fulfil the obligation of the timely completion of the project by arranging the deficit finances from his own resources. The builder will inform the allottees every three months regarding progress of the project.

20.17 Withdrawal of Allotment: The allottee can surrender his allotment of the unit by surrendering the original letter of allocation or allotment to the company and in this event, the builder will refund to the allottee the amount deposited till that time. In case the cancellation is made before allotment due to the default of the allottee, builder will refund total amount paid by the allottee till cancellation within thirty days. However, after the allotment of unit, 4 % of the amount paid that far, for the unit, will be retained by the builder and the rest of the amount will be refunded within thirty days.

20.18 Extension in Date of Completion: Extension in date of completion will be allowed to a builder if he produces documentary proof that more than 50 % of his clients have defaulted in payments of two or more instalments for over 6 month(s) period. The builder will also submit consent of at least 50% of the allottees while applying for the extension in time.

20.19 Sublet and Transfers of Allotment: The allottee can sublet, transfer or sell his unit to any one, with prior written permission of the builder, who will allow transfer on receipt of all outstanding dues up to that time and transfer fee at rate 0.5 % of total price of unit. No transfer fees will be charged in case the transfer is made within three months of allotment.

20.20 Physical Possession and Caretaking Charges: The builder will, after obtaining Occupancy Certificate from the PDOHA, which will include the provision of electric, gas, water and sewerage services (obtained by the builder from respective civic agencies), issue intimation letters to the allottees. The allottee will take over possession of the unit within 30 days on receipt of such letter from the builder. In case of delay, the builder will charge per month as specified in the agreement from the allottee for caretaking of the unit in good condition.

20.21 Delay in Completion and Compensation for Period of Delay: The builder will complete the project and hand over physical possession of the unit complete in all respect to the allottee by the time specified by PDOHA. In case of delay in handing over possession, the builder will pay mark up to the allottee at the rate of prevailing bank rate on the total amount paid, for the period of delay calculated from the completion time specified by the PDOHA or extension made thereof.

20.22 Abandonment of the Project: If, for any reason, the project is abandoned by the builder, the builder will refund the total amount received from the purchaser with mark up at the prevailing bank rate on the same, for the whole period of retention of the money. An additional compensatory amount equal to 10% of the amount received from the allottee up-to-date against the booked unit, within sixty days of the announcement to the effect of the abandonment of the project, will also be paid by the builder.

20.23 Defect Liability: The builder will assume defect liability of the unit for a period of one year in respect of structure and six months in respect of fixture from the date of offering possession of the unit after obtaining Occupancy Certificate, and all defects will be rectified.

20.24 Sale or Transfer of the Project (Excluding Special Projects):

Builder will not sell or transfer whole project to any one for sale, or transfer the units of the project to the general public, unless prior intimation to the PDOHA is given and No Objection from two-third majority of the allottees is obtained. The new builder will assume all responsibility and liabilities of the agreement made between outgoing builder and allottees after completing the transfer procedure as per Transfer Regulations of PDOHA. In addition, the new builder must get a fresh NOC from PDOHA in his favour. In case the owner/transferee fails to comply with these Regulations, A/B Lease as well as Allotment will be determined forthwith by PDOHA.

20.25 Formation of Association and Maintenance of Utilities: Allottees would form an association to handle affairs of project and maintenance of the services and amenities. The rights of easement, appurtenances and other common rights will be transferred to such association.

20.25.1 Each commercial/ high-rise building in PDOHA, will be maintained by the Owner/ Developer of the Building directly or through a proper Maintenance Company. In case developer has completely sold the sub units then building will be maintained through a committee organized or formed by the owners. Penalty will be imposed if maintenance system of the building is not carried out by the owners/ developer.

20.25.2 The Owner / Developer will charge monthly Maintenance Fees to the occupants on pro-rata sq. ft. basis.

20.25.3 Maintenance will include the cleaning (external & internal) & maintenance items including common utilities, Electrical & Mechanical works, Central A/C, Central Backup Generator, Fire-Fighting, Lifts, Trash handling, External Window Cleaning, etc.

20.25.4 Trash handling will be done using trash/ refuse chutes and receptacles. These will be provided of a type approved by the PDOHA and will confirm with the following clauses:

20.25.4.1 At least one garbage chute, non-corrosive, non-stick, smooth finished impervious inner surface; linking all floors in the building will be provided with a collection room at basement, ground or parking floor level for final disposal. The Garbage chute should:

20.25.4.1.1 Be vertical for the whole length.

20.25.4.1.2 Have an internal diameter of not less than 2'-0".

20.25.4.1.3 Will be provided 4'-0" above the roof and will be covered with a ventilating skylight, flushing spray or sprinkler head above top loading door.

20.25.4.2 Discharge into a suitable movable receptacle or receptacles of adequate size and pattern.

20.25.4.3 Fitted with a self-closing hopper tight fitting plank or hopper, constructed of non-inflammable materials.

20.25.4.4 Enclosed with masonry wall (minimum 2 hours of fire resistance).

20.25.4.5 Refuse receptacles will be housed in a chamber, which will:

20.25.4.5.1 Concrete curbs for refuse receptacles to stand on.

20.25.4.5.2 Adequately fly and vermin proof.

20.25.4.5.3 Connected to and drained by a foul water drain.

20.25.4.5.4 Open to the external air.

20.25.4.5.5 Lined throughout with glazed tiles.

20.26 Settlement of Disputes: All disputes of the builder and allottee will be referred to PDOHA. Any appeal against the decision made by the authorized officer of the PDOHA may be filed before the Administrator PDOHA, whose decision will be final and binding.

20.27 Instructions of PDOHA: Besides the above Regulations, the orders and instructions of the PDOHA in accordance with these Regulations, issued from time to time, in this regard will be followed strictly.

20.28 Use of Amenity Spaces: Common use or amenity spaces, recreational area, parking area in the project will be neither converted nor miss-utilized but will be used exclusively for the benefits of the allottees of the project as per approved plan.

PDOHA Building Regulations 2020

PDOHA FORM 1

APPLICATION FOR APPROVAL OF BUILDING PLAN

The Director
Town Planning & Building Control Directorate
PDOHA Karachi.

1. In pursuance to PDOHA Building Regulations 2020. I/We hereby apply for approval of building plan on plot no. _____ at _____ PDOHA Karachi

2. Necessary particulars are given below and certified to be true:
- Allotment order/Transfer order/ Mutation of lease A, B, or 'C' as the case may be).
 - Intended use of proposed building works; and
 - Description of the proposed building works

3. Drawings and Documents are enclosed as per checklist

4. Registered Architect, Registration No. PCATP _____ is hereby authorized by me/us to do all things required to be done under these Regulations on my/our behalf. (if applicable)

5. I/We undertake that I/we shall be personally responsible for any violation of these Regulations, if any, accompanying the sanction of the plan/plans.

Owner Signature: _____
Address: _____
Dated _____
Telephone # _____

PDOHA BUILDING CONTROL AND TOWN PLANNING REGULATIONS 2020

PDOHA FORM 2

REGISTERED ARCHITECT'S CERTIFICATE

(To be accompanied with Form 1)

This is to certify that the building plan for plot no. _____ at _____ PDOHA Karachi has been prepared by me/us and that I/we undertake to supervise the proposed construction as per building plan submitted herewith. I/We further undertake that if I/We discontinue supervision of the work, I/We shall give immediate intimation thereof, as required under the above Regulations.

Name & Signature of Architect _____

Registration # PCATP _____

Registration # CBC _____

Category of Registration: _____

Date: ____/____/____.

PDOHA BUILDING CONTROL AND TOWN PLANNING REGULATIONS 2020

PDOHA FORM 3

REGISTERED ENGINEER'S CERTIFICATE

(To be accompanied with Form 1)

This is to certify that the structural drawings for Plot No _____ have been prepared by me/us and that I/we undertake to supervise the proposed construction as per drawings submitted herewith. I/We further undertake that if I/we discontinue supervision of the work, I/we shall give immediate intimation thereof, as required under the above Regulations.

Name & Signature of
Civil / Structural Engineer _____

Registration # PEC _____

Registration # CBC _____

Category of Registration: _____

Date: ____/____/____.

PDOHA BUILDING CONTROL AND TOWN PLANNING REGULATIONS 2020

PDOHA FORM 4

NOTICE OF DISCONTINUANCE

The Director
Town Planning and Building Control Directorate
PDOHA Karachi.

I hereby give notice of my discontinuance from the building works with effect from ___/___/___ as the Registered Architect/Civil Engineer/Structural Engineer in respect of Plot No. _____ at _____ PDOHA Karachi. It is certified that the building work to date on the said plot has been carried out under my supervision and to my entire satisfaction

Name & Signature(s) of Architect/ _____
Civil / Structural Engineer
Registration # PEC/PCATP _____
Registration # CBC _____
Category of Registration: _____

Date: ___/___/___.

Description of the work:

- 1.
- 2.
- 3.
- 4.
- 5.

Copy to:-

(Owner's Name)

(Owner's Address)

PDOHA BUILDING CONTROL AND TOWN PLANNING REGULATIONS 2020**PDOHA FORM 5****VERIFICATION OF BUILDING AT DIFFERENT CONSTRUCTION STAGES**

The Director,
 Town Planning & Building Control Directorate,
 PDOHA Karachi.

1. I/We hereby inform that I/We have commenced the building works on Plot No. _____ at _____ PDOHA and also to bring into your notice that the following important stage of construction of building has been completed i.e. the foundation, plinth and pouring of all roof levels:

2. You are, therefore, requested to depute a representative to verify the construction at the above mentioned foundation level/plinth level/subsequent floor level/stair tower / mumty to enable me/us to carry out the building work.

Owner's Signature _____
 & Address _____

ARCHITECT/ STRUCTURAL ENGINEER CERTIFICATE

I/We hereby certify that the construction of building on Plot No. _____ at _____ PDOHA has been carried out in accordance with the sanctioned plan (s).

Registered Architect/Engineer _____
 Signature: _____
 Registration # PEC/PCATP _____
 Registration # CBC _____

PDOHA BUILDING CONTROL AND TOWN PLANNING REGULATIONS 2020

PDOHA FORM 6

NOTICE OF COMPLETION

The Director,
Town Planning & Building Control Directorate,
PDOHA Karachi.

I/We hereby give notice of completion of building on plot no. _____
at _____ PDOHA, and apply for permission
for occupation of the said building.

The said work has been carried out in accordance with sanctioned Building Plans
received vide letter no. _____ dated _____.

Owner's Signature,
Address & Tel. No.

Dated: ____ / ____ / ____.

ARCHITECT'S/ENGINEER'S CERTIFICATE

I hereby certify that the building on plot no. _____ at
_____ PDOHA have been completed
under my supervision and to my satisfaction in accordance with the building plans
sanctioned vide letter no. _____ dated _____.

Registered Architect/Engineer:

Signature:

PEC/ PCATP Registration No

CBC Registration No

PDOHA BUILDING CONTROL AND TOWN PLANNING REGULATIONS 2020

PDOHA FORM 7

REGULARIZATION OF WORKS CARRIED OUT WITHOUT PERMISSION

The Director,
Town Planning & Building Control Directorate,
PDOHA Karachi.

1. Whereas I/We have carried out construction on plot no _____ at _____ PDOHA as shown on the plan attached here with.

2. Whereas I/We have made deviations from building plans sanctioned vide letter No. _____ dated _____ in the course of construction of the building/ alteration and additions to the building as shown on the plans attached herewith.

3. Whereas I/We are willing to make any alteration required to be made in the said structure to make it consistent with the permission of the PDOHA and willing to pay the composition fee imposed by the PDOHA for regularization of unauthorized construction/deviations from approved plan or in violation of Regulations. It is therefore, requested that plans may be regularized by way of composition as per byelaw.

Owner's Signatures & Address _____

STRUCTURAL ENGINEERS CERTIFICATE

I/We hereby certify that existing structure on plot no. _____ at _____ has been fully and correctly shown on the plan submitted by me/us. Moreover, I/we further certify that the building is structurally stable. Necessary structural calculations and detail are attached herewith.

Structural Engineer: _____
 Signature: _____
 PEC Registration # _____
 CBC Registration # _____

PDOHA BUILDING CONTROL AND TOWN PLANNING REGULATIONS 2020

PDOHA FORM 8

CONSTRUCTION OF SWIMMING POOL (INDEMNITY BOND)

On Rs.100/- Stamp Paper

1. I, _____ S/o,D/o,W/o _____
R/o House No. _____ solemnly
affirmation that I am the owner of Plot No. _____, measuring _____
sq yd located in Defence Housing Authority. That I have applied for permission to
construct building on the said plot. I intend to construct a swimming pool on the
same plot for which I undertake to fulfill the following conditions:-

- a. To be appropriately protected for privacy.
- b. Not to be constructed in COS.
- c. Change/shower room is provided.
- d. Proper filtration plant will be installed.
- e. Holding tank of appropriate capacity to be provided.
- f. Any damage caused to neighbouring building will be made good by owner constructing swimming pool.
- g. Arrangement for disposal of water will be ensured.
- h. It will be structurally designed and signed by registered Structural Engineer.

2. That the above declaration is true and correct to the best of my knowledge and belief.

DEPONENT

PDOHA BUILDING CONTROL AND TOWN PLANNING REGULATIONS 2020**PDOHA FORM 9****CONSTRUCTION OF BASEMENT (INDEMNITY BOND)**

On Rs.100/- Stamp Paper

1. I/ we, affirm that I am the owner of plot no. _____ at _____ PDOHA Karachi, that I/we have submitted building plan and intend to construct a basement on the plot for which I/we undertake to fulfil the following conditions: -

- a. If any damage is done to the neighbouring structure due to the basement, it will be my/ our responsibility to make good the losses or in the event of my/ our failure to do so, the owner/ PDOHA may make good such repair at my/ our cost or any other measures as deemed fit by the PDOHA.
- b. It will be structurally designed and signed by the Registered Structural Engineer.

2. That the above declaration is true and correct to the best of my knowledge and belief.

DEPONENT



PAKISTAN DEFENCE OFFICERS HOUSING AUTHORITY KARACHI

APPLICATION FORM – NO OBJECTION CERTIFICATE

MANDATORY FOR COMMERCIAL BUILDINGS

(Please Strike out whichever is not applicable)

Subject: **No Objection Certificate for Sale/Rent and Advertisement of Housing Units/Flats/Shops/Offices Etc.**

Name of Owner(s) _____ S/o, D/o, W/o _____

CNIC No. _____ PDOHA Membership No. _____

Resident of _____

Tel No(s): Mobile _____ Residential _____ Office _____

I, hereby apply for grant of NO OBJECTION CERTIFICATE (NOC) under Chapter XXI of BC & TP Regulations 2020, for Sale/Rent and Advertisement of Housing units/flats/Pent Houses/Shops/Offices for our project (Name of Project) _____ Located on (Plot No) __ Street/Road/Khayaban _____ Phase __ PDOHA.

Note: The required information/documents supplied on the prescribed **Project Digest Form (PDF-1)** are attached with **NOC** application. Extra sheet may be added for complete details.

(1) _____
Signature of Licensed Architect
License No. _____
Name _____

(2) _____
Signature of Licensed Engineer
License No. _____
Name _____

Seal of the Consulting Architectural Firm

Seal of the Consulting Engineering Firm

(3) _____
Signature of Licensed Architect
License No. _____
Name _____

(4) _____
Signature of Licensed Engineer
License No. _____
Name _____

Seal of the Builder/ Construction Co.

Seal of the Owner/Attorney (if available)

INSTRUCTIONS

1. Please read the following instructions carefully and follow them strictly while preparing cases for NOC for submission.
2. The Authority will reject incomplete applications or carelessly prepared cases. Applications containing incorrect information or misrepresentation of facts will be rejected.
3. In case the applicant is other than the owner then a registered General Power of Attorney (GPA) in favor of the applicant duly signed under camera at Transfer and Record Directorate, PDOHA, by all owners / partners / Managing Director / Attorney / Authorized Person of Firm / Organization should also be submitted.
4. All enclosures should be according to the format, in order and duly flagged. All forms and enclosures, and documents etc. should be signed by the Owner / partners / Managing Director / Authorized Person and bear seal of the Owner / Builder.
5. All enclosures to be provided in duplicate (2x copies).
6. In case of insufficient space for entries, attach separate sheets for details.
7. No addition or alteration in the prescribed format of undertaking is acceptable.
8. After initial scrutiny, objection / observation letter (if any) will be issued by PDOHA to which response / compliance if not received within 30 days, PDOHA may close the case, however, owner may apply again for NOC.
9. Services NOC(s) issued by the concerned authorities to be enclosed with each application to issue NO OBJECTION CERTIFICATE for sale / rent and Advertisement.
10. The owner/builder before issuance of NOC for sale will deposit the Security Deposit.

PROJECT DIGEST FORM**1. Details of Project**

- a. Name of Project (if any) _____
- b. Address of Project _____
- c. **Units Available**
- | | | |
|------------------------------|-------|------|
| (1) Flats | _____ | Nos. |
| (2) Duplex | _____ | Nos. |
| (3) Pent House | _____ | Nos. |
| (4) Commercial units (Shops) | _____ | Nos. |
| (5) Offices | _____ | Nos. |
| (6) Amenity Units | _____ | Nos. |
| (7) Other | _____ | Nos. |
| Total | _____ | Nos. |
- d. **Owner/Attorney**
- (1) Name _____
- (2) Office Address _____
- (3) Tel No. _____
- (4) Email _____
- e. **Builder/Construction Company**
- (1) Name _____
- (2) Office Address _____
- (3) Tel No. _____
- (4) Email _____
- f. **Professional Supervision**
- (1) Architect :(with License No.) _____
- (2) Structural Engineer :(with License No.) _____
- (3) Site Engineer _____
- (4) Site Supervisor _____

3. Project is New/On-Going

- a. New/On-Going _____
- b. Date of Start _____

4. Plot Detail

- a. Category: Residential/Commercial/Industrial (Tick One)
- b. Address: _____
- c. Area: _____ Sq. Yd.

Seal and Signature of the Applicant

5. **Organizational Set-Up of the Owner/Builder**

- a. Proprietorship/Partnership Firm/Limited _____
- b. Enclose Memorandum and Article of _____

Association/Certificate from Registrar of Firms of the Owner/Builder (Flag – A)

6. **Dues Clearance Certificate (Finance Directorate)** (Attach Copy – Flag – B)

7. **Income Tax Registration on ATL (Active Tax Payers List) – (Yes No)**

8. **Ownership Documents** (Enclose attested copies of the following documents)

- a. Allotment/Transfer/Mutation (Flag – C)
- b. Copy of A/C Lease (whichever is applicable) (Flag - D)
- c. Valid Site Plan (Flag -E)
- d. Power of Attorney duly Registered in PDOHA (if applicable) (Flag – F)
- e. CNIC (Flag – G)

9. **Building Plan** (Enclose attested copies of the following documents)

- a. Approved Building Plan/ Revised Building Plan (Flag - H)
- b. Completion Certificate from CBC (if applicable – Flag - J)
- c. Occupancy Certificate from PDOHA (if applicable – Flag -K)

10. **Time Schedule**

- a. Date of Start of Construction _____
- b. Present Stage of Construction _____
- c. Reasons for Delay (if any) _____
- d. Date of Completion _____
- e. Date of Handing Over _____
- f. Work program (Specimen attached Flag –L)

11. **Price Estimates (Specimen attached – Flag – M)**

 Seal and Signature of the Applicant

12. Working of the Selling Prices and Relative Documents

a. Booked Residential – (Flag – N)

Price Estimates & Selling Prices

(Booked Units – Residential)

Sr. No	Name of Allottee	Address of Allottee	Unit Allocated	Price			Date of Booking	Date of Completion/ Handing Over
				Unit Price (a)	Extra Charges (b)	Price Committed c=(a+b)		

b. Booked Commercial – Flag – O)

Price Estimates & Selling Prices

(Booked Units – Commercial)

Sr. No	Name of Allottee	Address of Allottee	Unit Allocated	Price			Date of Booking	Date of Completion/ Handing Over
				Area (Sq ft) (a)	Rate (Sq ft) (b)	Price Committed c=(a+b)		

c. Un-Booked Residential – (Flag – P)

Price Estimates & Selling Prices

(Un-Booked Units – Residential)

Sr. No	Unit No.	Floor/ Storey	Price			Date of Completion	Remarks
			Unit Price (a)	Extra Charges (b)	Price Demanded c=(a+b)		

d. Commercial – (Flag – Q)

Price Estimates & Selling Prices

(Un-Booked Units – Commercial)

Sr. No	Unit No.	Floor/ Storey	Price			Date of Completion	Remarks
			Unit Price (a)	Extra Charges (b)	Price Demanded c=(a+b)		

SEAL AND SIGNATURE OF THE APPLICANT

13. **Sale/ Rent Documents (enclosed)**
 - a. Application Form (Flag – R)
 - b. Proposed Term & Condition / Sale Agreement (Flag – S)
 - c. Proposed Term & Condition / Rent Agreement (Flag – T)
 - d. Schedule of Payment (Flag – U)
 - e. Specification of construction (Flag – V)
 - f. Specification of Building Material (Flag – W)
 - g. Specification of finishes (Flag – X)
 - h. Rates for extra items (Flag – Y)

14. **Total Number of Units**
 - a. Residential _____ Nos.
 - b. Commercial _____ Nos.
 - c. Others _____ Nos.

15. **In Case of Revision**
 - a. Justification for Revision
 - b. Revised Priced BOQ & Quotation for extra items (Flag Z)

16. **Maintenance procedure and Terms & Conditions after completion of the project (Flag – AA)**
17. **Allocation and Booking Plan (Flag – BB)**
18. **Agreement of Construction b/w Owner & Builder (Flag – CC)**
19. **Undertaking Owner/Builder (Stamp Paper) (Flag – DD)**
20. **Undertaking Consulting Architect on Letter Head (Flag - EE)**
21. **Undertaking Consulting Engineer on Letter Head (Flag – FF)**
22. **Builder's License: Attested copy of license duly renewed (Flag – GG)**
23. **Draft of Advertisement: Draft of proposed advertisement with endorsement of the required information for English & Urdu Newspaper (Flag – HH)**

Seal and Signature of the Applicant

WORK PROGRAMME FOR THE PROJECT: _____

(Name of Project)

BEING CONSTRUCTED ON PLOT NO. _____

(Location of Project)

DATE OF START: _____ **DATE OF COMPLETION:** _____

S.NO	ITEM OF WORK	MONTHS												REMARKS	
		1	3	6	9	12	15	18	21	24	27	30	33		36
1.	Layout & Setting out Excavation														
2.	Foundation Work up to Plinth Level														
3.	Structure work														
4.	Masonry														
5.	Plumbing & Sanitation														
6.	Plastering														
7.	Kitchen, Doors, Windows, Wardrobe, etc.														
8.	Flooring														
9.	Electrification (Wiring & Fixtures)														
10.	Painting & Glazing														
11.	Fire Safety Works														
12..	Air Conditioning Works														
13.	Final Finishing/ uplift of surrounding area and landscaping														
14.	Possession														
15.	Progress (Percentage)														

- NOTE:**
1. Project should be completed within. Stipulated time as per approval.
 2. Indicate exact date of start and completion of each item/activity.
 3. Mark activities for each floor / level less for serial 1 & 2.
 4. Progress to be accumulated percentage age of Completion of Project at the end of month specified.
 5. Quarterly progress report to be submitted.

Seal and Signature of Owner/Builder

COST ESTIMATE OF THE PROJECT

S/No	Description	Total Amount (Rs)	Remarks
1.	Cost of land, Conversion Charges & Legal Fees etc		As per market price
2.	Processing / documentation cost		As per estimates / actual expenditure
3.	Cost of Construction (CoC)		As per estimates/ bill of quantities
4.	Cost of Plumbing & Sanitation		As per estimates/ bill of quantities
5.	Cost of Electrification.		As per estimates/ bill of quantities
6.	Cost of Gas Supply		As per estimates/ bill of quantities
7.	Cost of Air Conditioning		As per estimates
8.	Cost of Fire safety provisions		As per estimates
9.	Consultant's Fee		%age of cost of construction
10.	Advertisement & Brokerage		%age of cost of construction
11.	Advertisement/Service Charges		%age of cost of construction
12.	Misc./Overhead Expenses		%age of cost of construction
13.	Misc. expense (mention details)		As per estimates / expenditure
14.	Builder's Profit		%age of total cost of project
15.	Escalation		If permissible
Total Cost of Project			

Unit Price = $\frac{\text{Total Cost of the Project}}{\text{Total leasable area of the units in sq. ft.}}$ = _____ Rs. _____ per sq. ft.

Seal and Signature of Owner/Builder

UNDERTAKING FORM
OWNER / BUILDER

I, _____ S/O _____
(Name) (Name)
CINIC NO. _____, Resident of _____
Muslim Adult, Attorney & Proprietor of M/S _____
having _____ office _____ address _____ at
office _____ do hereby undertake
on behalf of the Builder as under:

That I / we are constructing the project "-----" being constructed on
Plot No. _____ (Measuring _____ Sq.yds) _____ and FLATS / SHOPS &
DUPLEX etc. shall be offered for sale/rent to the public through advertisement.

1. That we shall carryout the construction strictly according to the approved plan and specification granted by CBC/P.D.O.H.A Karachi.
2. That we shall use standard material as required under the code of practice specified.
3. That we shall not miss-represent the facts in advertisement in respect of no of floors, specification, unit price, schedule of payment and date of completion etc. as approved by the P.D.O.H.A Karachi.
4. That we shall start the project on _____ Day / Month / Year
5. That we shall accept the prices as fixed and final and shall not increase / revise them under any circumstances until completion and handing over possession of the units.
6. That we shall not entertain / register either directly or indirectly or through some agent applications for booking of housing units in excess of the numbers provided in the approved plans / NOC granted by P.D.O.H.A Karachi.
7. That we shall honour all commitments made by the owner / Builder or authorized booking agent, if any in respect of construction and sale of the housing / commercial units as per approved NOC for Sale & Building plan.
8. That we shall provide the service i.e. water supply, sewerage disposal etc. along with electricity and Gas supply through the concerned authorities to all allot tee's unit before completion of the project.
9. That we shall complete the formalities for lease and loan from the relevant Departments and shall render assistance to the allottees to get the sub-lease executed and obtain loan from HBFC within a reasonable period.
10. That the Architectural / Structural plans have been prepared by the following professionals:
 - a. Registered P.D.O.H.A/CBC Architect _____ Registration No. _____
 - b. Registered P.D.O.H.A /CBC Engineer _____ Registration No. _____
11. That supervision of construction at site will be undertaken by Engineer _____ PEC
Engineer No _____

12. That we shall intimate the Authority in case of any change in the above professional set up at any time.
13. That the ownership and title of the land is clear and no legal proceeding / dispute of sale of land or allotment of housing units of buyers is pending in any court of Law, Government Agencies etc.
14. That in case of litigation or dispute due to which the progress work is likely to be affected, we shall intimate the allottee of the situation and deal with the matter according to the provisions of Building Control & Town Planning Regulations 2020 P.D.O.H.A Karachi of amended up-to-date.
15. That we shall not sell / transfer the plot and the project to any other person without prior approval of the authority P.D.O.H.A Karachi.
16. That we shall follow and strictly abide the provisions of Building Control & Town Planning Regulations 2020 P.D.O.H.A Karachi amended up-to-dated.
17. That we have not appointed any booking agent for this project so far.
18. That we shall abide by the orders and instructions giving by the authority P.D.O.H.A Karachi in this regard.

Seal and Signature of Owner/Builder

Dated: _____

UNDERTAKING FORM
ARCHITECT

I, _____ working in the capacity of _____ with _____, having their office at _____ hereby undertake on behalf of their firms as follows:

1. That we have assigned by M/s _____ the work of planning design and supervision of construction of the project _____ on plot No. _____ offices units intended to be offered for public sale through advertisement.
2. That we have done planning and design of units in the project according to the Building Control & Town Planning Regulations 2020 P.D.O.H.A Karachi and the plans have been approved by the Authority vide their letter No. _____
3. That we shall supervise the construction work through all stages of execution and shall do the work strictly according to the approved plan and specifications.
4. That we shall not make changes in the approved plans without approval of the Authority PDOHA Karachi.
5. That we shall be responsible for all defects planning design and construction of the project.
6. That we shall be responsible for building strength and quality control.
7. That we shall follow all orders and instructions given by the Authority in this regard.
8. If I discontinue Supervision of the work, I shall give immediate intimation therefore, as required under the above Regulations.

UNDERTAKING FORM
STRUCTURAL ENGINEER

I, _____ working in the capacity of _____ with _____, having their office at _____ hereby undertake on behalf of their firms as follows: -

1. That we have assigned by M/s _____ the work of planning design and supervision of construction of the project _____ on plot No. _____ offices units intended to be offered for public sale through advertisement.
2. That we have done planning and design of units in the project according to the Building Control & Town Planning Regulations 2020 P.D.O.H.A Karachi and the plans have been approved by the Authority vide their letter No. _____
3. That we shall supervise the construction work through all stages of execution and shall do the work strictly according to the approved plan and specifications.
4. That we shall not make changes in the approved plans without approval of the Authority PDOHA Karachi.
5. That we shall be responsible for all defects planning design and construction of the project.
6. That we shall be responsible for building strength and quality control.
7. That we shall follow all orders and instructions given by the Authority in this regard.
8. If I discontinue Supervision of the work, I shall give immediate intimidation therefore, as required under the above Regulations.

PDOHAKARACHI BUILDING BYE LAWS 2020
PDOHA FORM 11
SUBMISSION OF FIRE SAFETY PRECAUTIONS OF BUILDING PLAN
(For F.A.R. Based Buildings)

The Director
 Town Planning & Building Control Directorate
 PDOHA Karachi

I/we M/S _____ Certify that we/our consulting MEP Engineer Mr./Mrs./M/s _____ had submitted drawings/documents as per the following checklist for the Fire Safety Precautions of the building on Plot No. _____ situated on _____ PDOHA on Dated: ___/___/___.

FIRE SAFETY PRECUATION APPROVAL CHECKLIST

Unique Project Ref:

Project Title:

Building Type: Commercial Commercial Cum Residential

Fire Safety Precautions are available to download from (mention website link)

S.NO	FIRE SAFETY SYSTEMS	Quantity Provided (NOs/Dims.)	TYPE	MAKE	COUNTRY OF ORIGIN	TESTING CERTIFICATES	COMMENTS
1	Emergency Fire Exits					Yes / No / Not Applicable	
	Emergency fire exits of non-combustible material					Yes / No / Not Applicable	
2	Portable Fire Extinguishing					Yes / No / Not Applicable	
	Two extinguishers in stage area, in each dressing room and one immediately outside each entry in theatres;					Yes / No / Not Applicable	
3	Fire Escapes/ Emergency Staircase					Yes / No / Not Applicable	
	400 square yards and above will have at least one emergency staircase					Yes / No / Not Applicable	
	Fire Rated Doors					Yes / No / Not Applicable	
	one emergency staircase located within 100 ft.					Yes / No / Not Applicable	
	elevators / lifts					Yes / No / Not Applicable	
	elevators / lifts with in-built emergency landing devices					Yes / No / Not Applicable	
	elevators / lifts with earthquake, seismic					Yes / No / Not Applicable	

	sensors installed						
	All required safety features for elevators					Yes / No / Not Applicable	
	Handicapped Accessibility compliant as per the following ADA requirements					Yes / No / Not Applicable	
	Elevator hall and car buttons as per ADA requirements					Yes / No / Not Applicable	
	Braille plates					Yes / No / Not Applicable	
	Two way communication					Yes / No / Not Applicable	
	Chimes / verbal announcements					Yes / No / Not Applicable	
	Accommodation of a wheelchair					Yes / No / Not Applicable	
	Door protective / re-opening devices					Yes / No / Not Applicable	
	Emergency control					Yes / No / Not Applicable	
	Handrails Heights					Yes / No / Not Applicable	
4	Stand Pipe Equipment (Hose Reel)					Yes / No / Not Applicable	
	Stand pipes standards as per following:					Yes / No / Not Applicable	
	Not less than 2.5 inch dia pipes					Yes / No / Not Applicable	
	Number of standpipes					Yes / No / Not Applicable	
	Standpipes location					Yes / No / Not Applicable	
	Galvanized iron/gun metal					Yes / No / Not Applicable	
	Stand pipe risers					Yes / No / Not Applicable	
	More than one stand pipe they will be interconnected at their bases by pipes equal in size					Yes / No / Not Applicable	
	Fire department approved in-let connection					Yes / No / Not Applicable	
	Every storey with a one and half inch dia flexible hose not less than 100'-0" long, with a half inch nozzle, being in an approved rack or cabinet					Yes / No / Not Applicable	
	Standpipe will be fed by an overhead water tank reserved solely for this purpose					Yes / No / Not Applicable	
5	Dry Riser					Yes / No / Not Applicable	
	A dry riser & Wet Risers					Yes / No / Not Applicable	
	Present 3 components to meet BS 5041 BS 5306, BS 9990 or other					Yes / No / Not Applicable	

	National Fire Protection association (NFPA) equivalent						
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6	External Inlets					Yes / No / Not Applicable	
	External cabinet or enclosure marked "DRY RISER INLET"					Yes / No / Not Applicable	
7	Pipe Work					Yes / No / Not Applicable	
	Dry riser distribution systems is of Galvanized steel pipe based on British standards laid down requirements for the pipes internal diameters or equivalent National Fire Protection association (NFPA) requirements.					Yes / No / Not Applicable	
	Vent Pipe					Yes / No / Not Applicable	
8	Outlet Points					Yes / No / Not Applicable	
9	Automatic Sprinkler System					Yes / No / Not Applicable	
	Every public use / institutional building which serves restrained or handicapped persons.					Yes / No / Not Applicable	
	Covered car parking areas					Yes / No / Not Applicable	
	Out garages or terminals					Yes / No / Not Applicable	
	Cottage manufacturing display or sale of combustible materials and products					Yes / No / Not Applicable	
	All areas of theatres except auditorium, music hall and lobbies					Yes / No / Not Applicable	
	All building areas used primarily for storage of goods					Yes / No / Not Applicable	
	immediate vicinity of generators or any electrical equipment					Yes / No / Not Applicable	
	all generators or any electrical, Information and Communications Technology (ICT) equipment FM-200 (Clean Agent and IFC 227 ea system)					Yes / No / Not Applicable	

10	Construction of sprinkler System					Yes / No / Not Applicable	
	Suitably Marked "Fire department connection-Automatic sprinklers"					Yes / No / Not Applicable	
	Automatic sprinkler system will be fed by overhead water tank reserved					Yes / No / Not Applicable	
	set off automatic alarm system simultaneously					Yes / No / Not Applicable	

	readily accessible outlet valve to control all sources of water supply					Yes / No / Not Applicable	
11	Fire Fighting Pumps according to NFPA/Building Codes of Pak. Fire Safety Provision 2016					Yes / No / Not Applicable	
12	Fire Alarm Systems according to NFPA/ Building Codes of Pak. Fire Safety Provision 2016					Yes / No / Not Applicable	

***Note:** Fire evacuation plans to be attached along with this form for approval.

We/I certify that all the above information provided is True to my knowledge and we hereby undertake full responsibility.

Owner/Lessee/Allottee/Attorney
Sign: _____

Registered
Architect/Engineer _____

Address: _____

Signature& Seal: _____

PDOHA BUILDING CONTROL AND TOWN PLANNING REGULATIONS 2020

PDOHA FORM 12

CONTRACTOR'S CERTIFICATE

(To be accompanied with letter from Owner for starting of construction)

This is to certify that the owner Mr. / Mrs. /Miss/Ms. _____ for Plot No _____ have hired the services of our firm/ Independent Contractor _____ for the construction / execution of the said project. The contracting firm/ independent contractor will supervise the construction as per the approved drawings from PDOHA/ CBC. I/we further undertake that if I/we discontinue supervision of the work, I/we shall give immediate intimation thereof, as required under the above Regulations. That we are responsible for the execution of work as per drawings and specifications & will ensure Health & Safety of workers at project during execution.

Name, Signature & Stamp of
Contractor

Registration # PEC / PCATP
Of the contractor firm (if held)

Category of Registration:

Name & Signature of
Civil Engineer of contractor
Supervising the work

Registration # PEC

Date: ____/____/____.

List of Abbreviations

ADA	-	Americans with Disabilities Act
PDOHA	-	Pakistan Defence Officers Housing Authority Karachi
CBC	-	Cantonment Board Clifton
COS	-	Compulsory Open Space
PEC	-	Pakistan Engineering Council
PCATP	-	Pakistan Council of Architectures and Town Planners
FAR	-	Floor Area Ratio
HVAC	-	Heat Ventilation and Air Conditioning
LED	-	Light Emitting Diode
LRV	-	Light Reflective Value
SRI	-	Solar Reflectance Index
TP&BC	-	Town Planning & Building Control
UHI	-	Urban Heat Island
RCC	-	Reinforced Cement Concrete
ICT	-	Information Communication Technology
UBC	-	Uniform Building Code
WC	-	Water Closet
MEP	-	Mechanized Electrical Plumbing
NOC	-	No Objection Certificate
PVC	-	Poly Vinyl Chloride
DPC	-	Damp Proof Course
SOP	-	Standard Operating Procedure
LPG	-	Liquid Petroleum Gas
CNG	-	Compressed Natural Gas

ASME	-	American Society of Mechanical Engineers
COP	-	Car Operating Panel
ASHRAE	-	American Society of Heating Refrigerating And Air Conditioning Engineers
ASTM	-	American Society for Testing and Materials
SWH	-	Solar Water Heaters
VVVF	-	Variable Voltage and Variable Frequency
TLV	-	Threshold Limit Value
VOC	-	Volatile Organic Compound
ODP	-	Ozone Depletion Compound
NFPA	-	National Fire Protection Agency
CIBSE	-	Chartered Institute of Building Service Engineers
BF	-	Basement Floor
FF	-	First Floor
GF	-	Ground Floor
GWP	-	Global Warming Potential