DHA CITY KARACHI (DCK)
DEVELOPMENT & CONSTRUCTION
BYELAWS 2017

ACKNOWLEDGMENT

Verily all praise belongs to Almighty Allah, Who has given the courage and strength to accomplish this important task. We are thankful to President Executive Board (PEB) DHA and Administrator DHA for their guidance.

Following team of professionals from Town Planning & Building Control Directorate DHA alongwith Consultant M/S Osmani & Company Pvt Ltd, have dedicated their efforts in successful completion of Development and Construction Byelaws 2017 for DCK.

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We would also like to express our profound gratitude to Architect Association, Residents of DHA, Pakistan Green Building Council and for their valuable input and support throughout this task.

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Chapter I Preliminary

1.1. Authority

1.1.1. In exercise of the powers vested in the Executive Board under Article 23 of the Presidential Order No. 7 of 1980 and all other enabling powers in that behalf, the Executive Board hereby makes the following Byelaws for carrying out the additions to, or alterations in, or demolition of the existing buildings, or erection or re-erection of new buildings and town planning parameters to be followed in DCK Authorities (DCK), Pakistan Defence Officers Housing Authority (DCK), which shall be deemed to have come into force with effect from 1st November 2017 vide Special Executive Board Meeting No. **3/2017** dated 31st October 2017.

1.1.2. These Byelaws are hereby promulgated and published and will be implemented in full spirit under the title of:

"DCK Authorities (DCK), Development & Construction Byelaws 2017".

1.1.3. These Byelaws are hereby promulgated under short title of:

"DCK Byelaws 2017"

1.2. Application and Commencement: These Byelaws shall have an optimistic impact on people living within the jurisdiction of DCK Authorities.

- **a.** These Byelaws shall come into force at once.
- **b.** Any member who intends to construct /carry out building works in DCK Authorities shall strictly comply with the requirements of these Byelaws.
- **c.** Defaulting members are liable to disconnection of services and financial penalties.
- **d.** The plot shall be strictly utilized for the purpose it has been allotted. NO DEVIATION SHALL BE PERMITTED.
- **e.** Every member, within the limits of DCK, 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 Byelaws.

1.3. Interpretation of Byelaws: In case of any ambiguity in interpretation of these Byelaws, DCK reserves the right to deliver/implement the interpreted contents of these Byelaws.

1.4. Modification/Amendments: These Byelaws shall be reviewed periodically and necessary amendments shall be incorporated as deemed appropriate by the DCK Authorities from time to time.

1.5. Exemptions: Application of these Byelaws may be relaxed for buildings erected by or on behalf of the Government/ Semi Government bodies and DCK, provided they are sound with respect to engineering, town planning and civic aspects.

Chapter II Definitions

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

2.1.1 "**Addition**": The addition of any unit or part or structure to any building or structure constructed in accordance with these Byelaws.

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

2.1.3 "**Amalgamation**": The joining of two or more adjoining plots into a single plot in accordance with these Byelaws.

2.1.4 "**Amenity Plot**": A non-leasable plot allocated exclusively for the purpose of amenity such as worship places, burial grounds and recreational areas (parks and play grounds).

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

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

2.1.7 "**Approved**": Approved in writing by the DCK Authorities.

2.1.8 "**Arcade**": A covered walk-way or a veranda between the shops and the road or street on which the shops abut.

2.1.9 "**Architect**": A person or a firm registered with Pakistan Council of Architects and Town Planners (PCATP) as an Architect or as an Architectural Firm.

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

2.1.11 "**Area**": The area of jurisdiction of DHA city, Karachi as shown in the Master Plan of DHA city, Karachi & including any extension or modification effected therein, from time to time.

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

2.1.13 **"Authority" for the purpose of these Byelaws:** The Pakistan Defence Officers Housing Authority established under the Pakistan Defence Officers Housing Authority Order, 1980 (PO. No.7 of 1980).

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

2.1.15 "**Basement**": Portion of the building partly or wholly below natural ground level or approach road level.

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

2.1.17 "**Building Line**": A line up to which any part of a building from its lowest level, including any and 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 Byelaws of such plots.

2.1.18 "**Building**": A house, outhouse, stable, latrine, shed but 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 ten feet in height and not abutting on a street) but does not include a tent or other portable and temporary shelters.

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

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

2.1.21 "**Byelaw (DCK)**": A set of laws essentially required to regulate, all types of Development and Construction activities within legal bounds of DCK, to be implemented by all persons and DCK Authorities.

2.1.22 "**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.

2.1.23 "**Car Porch**": A shelter or a shed for a car/vehicle, which is permanently open on at least two sides. Car porch having height not more than eight feet from floor to ceiling of the porch is a Low Car porch.

2.1.24 "**Central Business Sub-District (CBD):** It is zone in DCK, which is the hub for all business & commercial, office, retail, residential, leisure & recreational activities. It is also the centre point for transportation networks.

2.1.25 "**Commercial Building / Plot**":A building / plot where retail & office activities (including shops, Shopping Malls / Centres, show-rooms, stores / godowns, ware-houses, hotels, clubs, cinemas, petrol / gas filling stations) are allowed and no residential activity is allowed except bachelor room accommodation for the guard.

2.1.26 "**Commercial Mixed-use Building / Plot**":A building / plot constructed for combination of commercial and residential usage in which on ground floor & basement, retail / commercial activity is allowed whereas on upper floors, only residential accommodation (apartments /pent house) are allowed.

2.1.27 "**Community Area":** It is the area which consists of different amenities as well as commercial and mix use buildings to serve surrounding population of neighbourhood.

2.1.28 "**Competent Authority**": President Executive Board / Administrator of DHA KARACHI or any other officer empowered by the Authority to

approve (new, revised, addition etc) and cancellation of the plans and to control all aspects of building activities in DCK.

2.1.29 "**Completion Plan**": An "As Built Plan" submitted to the Board for the purposes of obtaining approval and occupancy certificate.

2.1.30 "**Compulsory Open Space (COS)**": Minimum part of a plot which is to be left completely and compulsorily open to sky under the Byelaws, over which no structure or any integral part of the building shall be permitted except ramp downward, permissible projections, basement, steps, septic tanks, soakage pits, water reservoirs and lines for sewage, water, electricity, gas, telephone etc, or those structures required by civic agencies such as electric sub-station permitted in these Byelaws.

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

2.1.32 "**Covered Area" (for the purpose of determining the floor area)**: The sum of the gross horizontal areas of the floor/floors, including, verandas, 25 percent of the area covered by pergolas, but excluding shades/projections (not exceeding the maximum permissible limits).

2.1.33 "**Cultural Zone / Area**": It is designated area for cultural, amusement & entrainment activities such as recreation, educational studios for culture & art development / performance, theatres, cinemas, clubs, cafes, libraries, museums, exhibition halls, etc.

2.1.34 "**DCK**": DHA City, Karachi.

2.1.35 "**Detached Building**": A building not joined to another building on any side.

2.1.36 "**Downtown**": It is an area consisting of public institutions with an administrative, cultural, educational and commercial character located in the lower part of CBD.

2.1.37 "**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 is a called a Duplex.

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

2.1.39 "**Ekistics**": A science with human settlements including regional, city, community planning and dwelling design. The study involves every kind of human settlement with particular attention to geography, ecology, human psychology, anthropology, culture, politics and occasionally aesthetics. Drawing on the research and experience of professionals in various fields such as architecture, engineering, city planning and sociology.

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

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

2.1.42 "**Existing Building**": A building existing on the date of the commencement of the plan.

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

2.1.44 "**Extra Land**": Any additional piece of land existing adjacent to any type of Plot will remain the property of DCK.

2.1.45 "**Fire Escape/ Exit**": An emergency exit from a building that may be used in the event of fire.

2.1.46 "**Flats**": Block / blocks of buildings consisting of a number of residential units built in a horizontal or vertical manner exclusively designed for human habitation in the Residential/ Commercial Area.

2.1.47 "**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 Byelaws.

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

2.1.49 "**Footprint**": The portion of a plot of land covered, at any level, by a building or part thereof other than basement.

2.1.50 "**Form**": Form appended to these Byelaws.

2.1.51 "**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.

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

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

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

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

2.1.56 "**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.

2.1.57 "**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.

2.1.58 "**Height of Building**": The vertical measurement from the mean level of the ground adjoining the building to the highest part of the roof.

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

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

2.1.61 "**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.

2.1.62 "**Industrial Building**": A building constructed on a plot allotted exclusively for the purpose under these Byelaws.

2.1.63 "**Inter Floor**": A floor provided between two main floors of the building.

2.1.64 "**LED (Light Emitting Diode)**": It is a two lead semiconductor light source.

2.1.65 "**License**": Permission granted by the DCK Authorities to perform such functions as allowed under these Byelaws.

2.1.66 "**Licensee**": An individual or firm holding authorized license to work in DCK.

2.1.67 "**Licensed Architect**": A person or an architectural firm authorized by P.C.A.T.P (Pakistan Council of Architects and Town Planners) and permitted to work in field after registration.

2.1.68 "**Licensed Engineer**": A person or a firm authorized by P.E.C. (Pakistan Engineering Council) and permitted to work in field after registration.

2.1.69 "**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.

2.1.70 "**Light Reflectance Value (LRV)":** It is a measure of visible and usable light that is reflected from a surface when illuminated by a light source.

2.1.71 "**Loft":** A horizontal slab used only for storage purposes, which shall be allowed in kitchens, baths, corridors and store rooms or shops with access from inside only upto five feet clear height between the loft floor and ceiling above.

2.1.72 "**Low Car Porch**": Car porch having height not more than eight feet from floor to ceiling of the porch.

2.1.73 "**Mezzanine**": Any floor inter-posed between ground and first floor of a building and having head room not less than 6 feet and not more than 7 ft.

2.1.74 "**Mixed-use Sub-District**": A sub-district which blends in residential, commercial, cultural and institutional buildings which are physically and functionally integrated providing pedestrian connections.

2.1.75 "**Mixed-use Zone**": A zone dedicated having mixed-use buildings with specific number of floor allocated to each building type as per the Master plan.

2.1.76 "**Mumty":** 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 alongwith room/s allowed as per these Byelaws.

2.1.77 "**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 Industries by the Industries Department from time to time.

2.1.78 "**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.

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

2.1.80 "**Park**": A recreational area, develop as such having greenery i.e plantation/grass which may include all or any of the following facilities.

- **a.** Jogging track/Walk-ways.
- **b.** Water features like lakes, fountains, gushers etc.
- **c.** Restaurants or cafeterias or food stalls.
- **d.** Aviary.
- **e.** Tube wells.
- **f.** Public toilets.
- **g.** Lawn / Green land.
- **h.** Play land.
- **j.** Any other outdoor / covered recreational facility.

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

2.1.82 "**Pergola**": A structure of which the roof must be at least seventy five percent open.

2.1.83 "**Playground**":

- **a.** All open spaces designated for indoor or outdoor sports activities of all types
- **b.** All structures serving sports activities like sports complex, gymnasiums, swimming pools, stadium, race course, golf course and, sports club of all kinds.

2.1.84 "**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 shall be limited to four feet as mentioned in specific Residential/Commercial category, except on plots where the natural contours are more than four feet over at least (forty percent) 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 shall be determined as per the site conditions.

2.1.85 "**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.

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

2.1.87 "**Public Building**": means a building designed for public use such as dispensary, post office, police station, Town Hall, library or recreational buildings, etc.

2.1.88 "**Registered Architect**": 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 in case of individual and having minimum one architect with minimum 10 years' experience in case of a firm and is on the approved panel of DCK Authorities.

2.1.89 "**Registered Proof Engineer**": An qualified 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 and whose name is listed on the panel of proof engineers maintained by DCK.

2.1.90 "**Registered Geo-Technology Consultant":** A qualified person or a firm registered with P.E.C. (Pakistan Engineering Council) with minimum 5 years' experience as Geo-Technologist in case of an individual and with at least one Geo-Technical engineer with at least 10 years' experience and is on the approved panel of geo-tech consultants maintained by the DCK.

2.1.91 "**Registered Structural Engineer**": A qualified person or a firm registered with P.E.C. (Pakistan Engineering Council) with minimum 5 years' experience as Structural engineers in case of an individual and with at least one structural engineer with at least 10 years' experience and is on the approved panel of DCK Authorities.

2.1.92 "**Registered Town Planner**": A qualified 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 as Town Planner in case of an individual and with at least one Town Planner with at least 10 years' experience and is on the approved panel of DCK Authorities.

2.1.93 "**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, rain, tides, waves, and geothermal heat. Renewable energy often provides energy in four important areas: electricity generation, air and water heating/cooling, transportation, and rural (off-grid) energy services.

2.1.94 "**Repair or Renovation**": Repair work to services, painting, white-washing, plastering, flooring, paving, replacement of roof of corrugated sheets or of T-iron or girders or wooden roof with RCC slab without change in the cubical capacity or structure approved by the DCK

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

2.1.96 "**Residential Zone**": A zone earmarked for buildings exclusively designed for human habitation and in no case shall 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.

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

2.1.98 "**Roof Top of Commercial and or Mixed-use Building**": Roof of Highest or topmost floor of the commercial and or mixed-use building, to house the common facilities like overhead water tank, stair tower, solar energy, lift well, etc and is shared by all inmates of the building.

2.1.99 "**Scrutiny Fee**": A fee to be determined and levied in pursuance of provisions of these Byelaws by DCK.

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

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

2.1.102 "**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.

2.1.103 "**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.

2.1.104 "**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.

2.1.105 **"Special Purpose Plot":** A leasable plot allocated exclusively for the purpose of Health, Education institutions or any other use as per DCK master plan.

2.1.106 "**Stores/Go-downs**": Building/buildings meant for storage of material or finished goods at the ground floor, provided these goods are not of inflammable or of objectionable character.

2.1.107 "**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.

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

2.1.109 "**Sub-Division Plan**": A layout plan depicting proposed sub-division duly approved by the DCK Authorities as provided in these Byelaws.

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

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

2.1.112 "**Sustainable Master Plan & Image Concept (SMPIC)**": A development 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 and the overall area of the DCK.

2.1.113 "**Temporary Structure**": A structure constructed purely on temporary basis, wholly within the plot with the approval of DCK for a specific period which shall be demolished within approved period i.e. shall be demolished before the last day of the specified approval.

2.1.114 "**Thermal Bridge":** It is an area of 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.

2.1.115 "**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 radiative influence.

2.1.116 "**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.

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

2.1.118 "**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 Byelaws.

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

2.1.120 "**TP&BC Dte**": Town Planning & Building Control Directorate.

2.1.121 "**Urban Heat Island (UHI)":** It is a city or metropolitan area that is significantly warmer than its surrounding rural areas due to human activities.

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

2.1.123 "**Zone**": The area earmarked for a particular purpose.

Chapter III General Byelaws

3.1 Applications: These Byelaws have been framed with a view to facilitate construction by the members. Due relaxation has been ensured while specifying covered area and other details. The following rules shall apply to all types of plots, buildings and land usage:-

3.1.1 Construction of ramp, stairs/steps leading to the first basement is permitted within in the side and rear COS without any super structure over them.

3.1.2 In case of two basements, the ramp leading to the 2nd basement shall only be constructed within the allowable footprint of the building.

3.1.3 3 ft wide balcony allowed towards roadside and maximum length of 20 ft Bay window in front COS is permitted with one door.

3.1.4 Maximum projection of sunshades over streets beyond 16 ft height and in compulsory open space shall not exceed 2 ft width at lintel level.

3.1.5 Under ground water tank and septic tanks / grey water tank to be kept 3 ft away from boundary walls.

3.1.6 Remaining within the allowable (prescribed) covered area of stair tower any space becoming available beyond the requirement of stair tower may be utilized for storage purposes. Construction of room, servant quarters and bath rooms/lavatories will not be allowed, however, the same shall only be allowed as a special case with following conditions:-

3.1.6.1 Subject to fulfilment of renewable energy requirements as mentioned in the Byelaws.

3.1.6.2 As a special provision for plots falling on cul-de-sac (round type).

3.1.7 Pitching of guard's tents/cabins outside the property line on DCK land or using the open plot for guard living is strictly prohibited. However, in special circumstances DCK authorities may allow temporary construction of a room along with a toilet not exceeding 125 Sft in front COS in addition to guardroom.

3.1.8 Whatever additional land is available between allotted plot boundary and sector limits for not more than 4 feet depth, the said land

may be allotted on payment to the owner on request. In this case building rules of the original category shall be applicable. However, in case land is more than 4 feet, change in area of the allotted Plot will govern as per the Byelaws.

3.1.9 Where the park is planned in the rear or on the side of the allotted plot, owner is not allowed any opening even a pedestrian way in the park, being a public property.

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

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

3.2 Exemptions from Floor Area Ratio (FAR)

3.2.1 Parking spaces (at any floor/level)

3.2.2 Recreational facilities and prayer places upto maximum 5%

3.2.3 Arcades

3.2.4 Ramps and driveways

3.2.5 Escalators/Lift towers

3.2.6 Stairs and stair towers

3.2.7 Open balconies over streets

3.2.8 Passages around voids

3.2.9 Underground / Overhead water tanks

3.2.10 Electric Sub Stations

3.2.11 Electrical/Mechanical plant rooms / solar energy plant room

3.2.12 Service areas including service duct for cabling to the extent of 100 Sft per floor.

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

3.2.14 Any other alternate energy item

3.2.15 All other requirements as mentioned in related Byelaws with respect to Handicap Accessibility and Utility requirements for commercial/mixed use buildings shall be followed.

3.3 Corner Plot: The owner of corner plot shall be required to pay additional charges as laid down by DCK Authorities.

3.4 Over/Under Size Plots: Plots having less area of specified category shall be considered as per original allotment category, however if area of plot is less than 95% then DCK Authorities shall compensate the owner as per prescribed rates. For plots measuring more than the allotment category, Owner shall be required to pay for the extra/additional area as per the prescribed rates decided by DCK Authorities from time to time. In case plot owner does not agree for payment of additional charges then owner may exercise any of the following options:-

3.4.1 DCK Authorities may facilitate the owner for payment of extra land through instalments.

3.4.2 Alternate plot of that allotment category shall be offered in any sector having compatible market prices as decided by the DCK Authorities.

3.4.3 DCK Authorities may buyback the plot as per prescribed rates.

3.5 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 DCK Authorities.

3.6 Bifurcation and Amalgamation of Plots

3.6.1 Bifurcation / Sub division is not allowed in any type of category of residential, commercial and amenity plots.

3.6.2 Amalgamation of residential and commercial plots shall be allowed maximum upto four times the size of the original plot, provided that the allotment conditions of the plots are similar.

3.6.3 Amenity Plots will not be considered for amalgamation.

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

3.8 Chamfering for Corner Plots: Boundary wall corners of end plots abutting two roads/streets will be chamfered as under:

3.8.1 Residential Plots

3.8.1.1 Junctions of roads 60 ft wide and above 10 ft x 10 ft

3.8.1.2 All other junctions 5 ft x 5 ft

3.8.2 Commercial Plots

3.8.2.1 Junctions of roads 60 ft wide and above 6 ft x 6 ft

3.8.2.2 All other junctions 4 ft x 4 ft

3.8.3 In case where radius is given at the corner of the plot the same shall be followed as per approved plan.

3.9 Services: The DCK Authorities will provide roads including all services and the members are required to plan extension of these services to their buildings accordingly. Further extension of the services to other users is strictly disallowed. Defaulting members are liable to disconnection of services and financial penalties.

3.9.1 Water Supply:

3.9.1.1 Application for water connection shall be made on the prescribed form to the DCK Authorities, before commencing any work and no water connection/work is to commence before approval.

3.9.1.2 No person is permitted to install motor/pump on the water supply line. Only one connection shall be provided for each building.

3.9.1.3 DCK Authorities has no obligation for provision of water for swimming pool.

3.9.1.4 Disposal of water from swimming pool shall not be allowed to be drained in the sewer lines.

3.9.1.5 Residential:

3.9.1.5.1.1 No water point/ tap will be left outside the boundary wall.

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

3.9.1.5.1.3 Member found violating the instructions on water supply shall have to pay violation charges as prescribed by DCK Authorities.

3.9.1.5.1.4 Washing of car on the road is not allowed.

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

3.9.1.6 Commercial:

3.9.1.6.1.1 Separate water meter connection to be installed by owners of office / shop in commercial buildings & flats in mixed use buildings.

3.9.1.6.1.2 Over Head water tank must consist of two portions, one for fire fighting and other for storage purpose.

3.9.1.6.1.3 It will be obligatory to make the underground water tank.

3.9.1.6.1.4 Boring of any type for the purpose of water, sewerage, drainage etc is strictly prohibited. However, where found necessary DCK Authorities may allow in special circumstances by giving special permission.

3.9.2 Sewerage/Manhole: Byelaws regarding house connection to main sewer are as under:-

3.9.2.1 W.C discharge is to be connected with the DCK manhole through septic tank.

3.9.2.2 Wash room and kitchen drainage shall be connected direct to the over flow manhole of septic tank. It must not be connected to the inlet of septic tank.

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

3.9.2.4 Members are required to construct proper main holes and septic tanks (RCC construction only). However, DCK Authorities can assist them by providing standard designs.

3.9.2.5 Members are required to get their septic tanks inspected before covering the tops.

3.9.2.6 Connection to the main sewer line shall be allowed by DCK Authorities on completion of house/building and member will not tamper with main sewer line. Defaulters will be charged as per DCK Authorities policy issued from time to time.

3.9.2.7 Where a resident/member excavates basement as per his requirement and decides to have bath rooms/toilets, the sewerage disposal will be through mechanical pumps by the resident.

3.9.3 Gas/Telephone/Electric/ICT:

3.9.3.1 The services have been laid by DCK Authorities and individual connection to houses be obtained from respective departments in accordance with respective departmental Byelaws.

3.9.3.2 On completion of construction and before main electrical connection is provided to the building/house, the member shall submit test report of electrical system issued by a government/K-Electric/ or DCK Electric Company's approved wiring Inspector.

3.9.3.3 An independent earth pit will be provided in the building/house. The earth resistance of the pit must be less than 5 ohms.

3.9.4 Damages: Damages to roads and utility service 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, such work shall not be undertaken without prior approval of DCK. In case of damages, DCK Authorities will impose penalties and cost of repair work will be recovered from member.

3.10 Bearing Capacity Test: Bearing capacity tests will be arranged by the member through a DCK Authorities approved laboratory. The approved list is available in TP&BC Directorate.

3.11 Termite Proofing: Members will ensure quality termite-proofing treatment before commencement of construction work.

3.12 Blockage of Street: All construction material shall be stored/kept within property line. No part of street / road or footpath shall be used in connection with any construction activity like : -

3.12.1 Storage of construction material.

3.12.2 Disposal of demolished material.

3.12.3 Mixing of concrete or cement mortar.

3.12.4 Erection of construction frames / supports / formwork.

3.12.5 Excavation of street / road for access to utility service, except with prior permission of DCK.

3.13 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: -

3.13.1 Chimneys, air conditioning and other ducts, vents and wind catchers.

3.13.2 Water tank.

3.13.3 Four feet high Parapet wall or railing is mandatory in case of accessible roof.

3.13.4 Stair tower and mumty (applicable as per related Byelaws).

3.13.5 Lift machine rooms, Sky light, etc.

3.13.6 Alternate Energy Solutions such as Solar and wind, etc.

3.13.7 Other structure, which the DCK Authorities may permit by general or specified order.

3.13.8 No mobile phone antennas and billboards are allowed on roof of residential unit. However, may be allowed for commercial unit subject to approval of DCK Authorities.

3.14 Specific Instructions for Shop Owners:

3.14.1 Proper arrangements for disposal of garbage shall be ensured by the owner or occupant in case of tenant of shops / public buildings.

3.14.2 No AC or its outer unit shall be fixed in front of the shop or the arcade.

3.14.3 All outer units of split ACs shall be fixed on roof or rear wall of the shops.

3.14.4 Where unavoidable ACs outer units, ACs may be fixed in the front arcade at height not less than 8 feet and with prior permission of the DCK.

3.14.5 Wall chalking / writing on walls and pasting of posters etc shall not be allowed.

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

3.14.7 No window AC shall be allowed.

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

3.14.9 No room cooler, fan, water cooler, generator, UPS batteries or charger shall be placed outside the shop.

3.14.10 No part of the building shall be altered, modified or pierced for fixing decorative material or display of goods.

3.14.11 Sign or name boards of only specified sizes shall be allowed.

3.14.12 No stand alone boards will be placed on streets, roads, arcade or passage.

3.15 Lighting and Ventilation:

3.15.1 **Size of External Openings:** Every room, other than rooms used predominantly for the storage of goods, shall be provided with natural light and natural ventilation by means of one or more openings in external walls. These openings shall have a combined area of not less than 10% for

habitable rooms and 7.5% for other rooms of the floor space of such opening, whole of such openings shall be capable of allowing free and uninterrupted passage of air.

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

3.15.2 Size of Internal Openings: Unless the light and ventilation requirements are met by an air well or ventilation duct, all internal habitable rooms must have openings in internal air wells in addition to door openings not less than 7.5% of the floor area of such room. Access for maintenance of shaft be provided at level from where the shaft commence.

3.15.3 Internal Air Wells:

3.15.3.1 Habitable rooms may receive daylight and natural ventilation from internal air wells which shall conform to the following minimum sizes:-

3.15.3.1.1 For buildings upto 2 storeys, 20 Sft with minimum width of well 5ft.

3.15.3.1.2 For buildings with 3 to 5 storeys, 100 Sft with minimum width of well 8 ft.

3.15.3.1.3 For buildings higher than 5 storeys, 100 Sft plus 10 Sft for each additional floor over storeys and minimum width of well 10 ft.

3.15.3.2 Where only kitchens, W.C and bathrooms receive daylight and ventilation from air wells, the size of wells shall conform to the following minimum widths:-

3.15.3.2.1 For building upto 2 storeys, 20 Sft with minimum width of well 3ft.

3.15.3.2.2 For buildings with 3 to 5 storeys, 40 Sft with minimum width of well 5 ft.

3.15.3.2.3 For building higher than 5 storeys, 40 Sft plus 5 Sft for each additional floor with minimum width of well 5 ft.

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

3.15.5 Water Closet, Bath Room & Ablution Places: Every water closet, urinal stall and bath room and ablution area shall be provided with natural lighting and ventilation by means of one or more openings in external walls having a combined area of not less than 2 Sft (1 ft x 2 ft) per

water closet, urinal or bathroom except where adequate and permanent mechanical ventilation is provided which discharges into an open space.

3.15.6 Garages: Every garage shall be provided with opening of not less than 5% of the floor area for ventilation and lighting incorporated in a wall or in the door.

3.15.7 Staircase: All staircases which are enclosed shall be provided with adequate lighting and ventilation from openings not less than 7.5% of the staircase area.

3.15.8 Mechanical Ventilation and Central Air Conditioning Waiver - Minimum Requirement:

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

3.15.8.2 Where permanent mechanical ventilation in respect of lavatories, water closets, bathrooms or corridors has been provided for and maintained in accordance with the following clauses, conditions relating to natural ventilation and natural lighting under these Byelaws may be relaxed for such lavatories, water closets, bathrooms or corridors.

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

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

3.18 Disputes: No member is allowed to stop the construction activity of other members. Any dispute/interpretation of Byelaws shall be referred to DCK Authorities.

3.19 Possession of Plots: Following procedure is laid down:

3.19.1 Site plan: DCK Authorities shall provide the Site Plan indicating measurements, size and location of Main Gate of the Plot to the member on prescribed form.

3.19.2 Building Plan: For preparation of building plans (new or alteration) the member should engage a licensed architect and structural engineer, existing on the panel of approved consultants of DCK.

3.19.3 Submission of Drawings: Members are responsible to submit the following drawings in accordance with DCK Byelaws.

3.19.3.1 Architectural Drawings: Member shall submit five sets of architectural drawings and a soft copy alongwith application form, covering following details: -

3.19.3.1.1 All drawings shall be submitted on sheet size of 30 x 40 inches and all details be given at a minimum scale of 1/8" = 1'-0".

3.19.3.1.2 The plans of basement, ground floor, upper floors and roof along with stair tower/Mumty.

3.19.3.1.3 Two point perspective view in colour with material finishes (showing front and side).

3.19.3.1.4 All elevations, two sections along x and y axis passing through stairs providing maximum details.

3.19.3.1.5 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.

3.19.3.1.6 Elevation and section of boundary wall, gate(s), ramp and water channel with respect to adjoining road/street.

3.19.3.1.7 External dimensions of building.

3.19.3.1.8 The clear dimensions of all rooms and position of doors, windows and ventilators in each room at every storey.

3.19.3.1.9 The position and dimensions of all projections beyond the walls of the building.

3.19.3.1.10 Roof plan showing the location/dimension of overhead water tank, stair tower/mumty.

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

3.19.3.1.12 Location of reference service manhole and its invert level and location of water connection shall be clearly shown on submission drawing.

3.19.3.1.13 Details of alternate energy solutions on roof/roof top with dimensions and heights.

3.19.3.1.14 Location and size of overhead and underground tank (for commercial/mixed use plots: show domestic and fire fighting water in a section alongwith its calculations).

3.19.3.1.15 The sewerage line and waste water/soap line should be laid independently and marked properly on the plan. The soap water should not be connected directly to the septic tank. It should be connected to underground grey water tank or directly to the main sewer line.

3.19.3.1.16 A water channel of 6 inch x 6 inch would be constructed along the main gate line. This drain would be suitably connected to over flow manhole of septic tank through a 4 inch dia pipe.

3.19.3.1.17 Schedule of open / covered areas.

3.19.3.1.18 Schedule of doors and windows.

3.19.3.1.19 Covered area calculation block plan.

3.19.3.1.20 Compliance of architectural features for elevations as per Sustainable Master Plan Image Concept (SMPIC).

3.19.3.1.21 Signature of Owner and the Licensed Architect on drawings along with required forms.

3.19.3.1.22 Drawings must be of acceptable Architectural standards.

3.19.3.1.23 All documents as per checklist relating to the plot shall be provided with the application.

3.19.3.2 Structural and MEP drawings: On receipt of approval of architectural drawings, the owner shall submit complete structural and MEP drawings and calculations with 4 x sets of hard copies on sheet size of 30 inch x 40 inch and two soft copies (1 x Autocad & 1 x PDF) as per following details:-

3.19.3.2.1 Soil investigation report (one hard copy and one soft copy in PDF) along with structural drawings, duly signed by the DCK's approved structural engineer along with a certificate on letter head that the structure is safe catering seismic design along with structural calculations. The drawings showing layout and sectional details of foundations, beams columns, lintels, slabs, underground, and overhead water tanks. This set of drawing is only for DCK record and Authority has no responsibility regarding the stability / safety of the structure. In case of any building over G+1 storey, the structural design should be duly vetted by the DCK approved vetting engineer.

3.19.3.2.2 Security charges as per DCK's approved rates, which will be refunded at the time of issuance of completion certificate after deduction of charges / penalty (if any) imposed on violations during the course of construction.

3.19.4 Scrutiny of Drawings: Following procedure will be followed:-

3.19.4.1 Member shall submit the plans with DCK for approval as per the Byelaws.

3.19.4.2 Plans not conforming to these Byelaws shall be returned by mail or by hand.

3.19.4.3 Members can collect approved drawings along with Approval letter.

3.19.4.4 On approval of Architectural plan, owner shall submit Structural drawings for approval as per procedure of Residential and Commercial buildings.

3.19.4.5 After approval, member can proceed for demarcation.

3.19.5 Oversight in Scrutiny of Drawings: Any oversight in the scrutiny/NOC of documents and drawings at the time of approval and sanctioning of the building plan does not entitle the member to violate the Byelaws.

3.19.6 Responsibility for Structural Stability: For any building constructed at DCK, the structural engineer shall be liable for the design part, whereas the contractor shall be responsible for the structure stability being the constructor of the building. DCK Authorities shall not be liable for structure stability of any building.

In case of structural failure, procedure laid under dangerous buildings shall be followed.

3.19.7 Inspection Card for Construction:

3.19.7.1 Inspection card shall be provided by DCK Authorities to the member along with prescribed demarcation proforma. Inspection card shall be held by owner, ensuring safe custody with upto date entries of different inspection stages by DCK official.

3.19.7.2 It is the responsibility of member to ensure that the inspection of work on each stage of construction is carried out as per Inspection Chart/ schedule duly signed by building inspector of DCK. If any anomaly is identified at a later stage, member will be held responsible.

3.19.7.3 Prescribed charges will also be levied for issuance of new inspection chart, in case of loss.

3.19.8 Demarcation of Plot: After approval of Architectural, Structural and MEP drawings, member is required to apply for demarcation of Plot. On receipt of Demarcation letter, member is advised to follow steps given below for physical demarcation of plot before undertaking construction and thereafter for confirmatory check by survey team of DCK:-

3.19.8.1 Step-I: Member to deposit the inspection card prescribed by DCK and arrange following items for demarcation on site at coordinated time:-

3.19.8.1.1 Four pieces of 4 inch Dia PVC pipe having length of 2-½ ft each.

3.19.8.1.2 Cement, aggregate and water along with its batching preparation items.

3.19.8.1.3 Required skilled labour.

Member/Contractor will get the Demarcation Pillars grouted / installed at the location indicated by DCK survey team in their presence. Demarcation Pillars shall not be disturbed or removed till the final demarcation of boundary wall up to DPC level.

3.19.8.2 Step-II: Inspection Card will be forwarded to DCK Authorities for inspection of building construction activities after completion of initial demarcation. Member shall ensure demarcation for second time on laying of lean concrete after excavation of the boundary wall before applying issuance of Plinth Level NOC on the inner building in case of no basement. However, in case of basement(s), member shall ensure demarcation for second time on laying of lean concrete and third time at DPC level of boundary wall whenever the basement is completed.

3.19.8.3 Step-III: Before start of construction of boundary wall, member must intimate DCK Authorities for final demarcation of lean / DPC level. DCK Authorities will also ensure that the plot is finally demarcated on lean / DPC level of boundary wall before under taking any further construction.

Notes:

a. The steps mentioned above are laid down for the convenience of members / contractors in order to avoid any

violation at later stage. Please follow these SOP strictly otherwise members will be held responsible of any violation.

b. In case of disturbance of pillars, demarcation will be done again and prescribed charges will be levied.

3.19.9 Approved Drawings: The member/contractor must keep one full set of approved drawings (architectural, structural and MEP) on site, which may be made available to DCK staff during inspection. In case of non-availability of approved drawings; penalty would be imposed as per policy of DCK at prescribed rates from time to time.

3.19.10 Inspection of Building at Various Construction Stages: Inspection of building shall be carried out by team of DCK and documented as per the procedure laid in the inspection card. Inspection shall be carried out at following stages, however, construction stages may increase/decrease depending on the demand of time/resources/technology:

a. In case basement is to be constructed then:-
  1) On ground demarcation of area to be dug in.
  2) Lean/Foundation.
  3) Roof level before pouring roof.

b. Ground floor at finish floor level including boundary wall.

c. On attaining roof height of Ground Floor before pouring in of roof.

d. On raising of structure/pillars one (1) foot above floor level of first floor and upper floors.

e. On attaining roof height of first floor and upper floors.

f. On attaining roof height of water tank and mumty, whichever is higher (if applicable).

g. On completion of Septic Tank prior to putting their cover.

h. Air & water pressure quality test of Plumbing lines (for commercial buildings).

j. Structural Engineer has to submit quality control and quality assurance proformae at different stages during the course

of construction so that DCK Authorities can give the go ahead for next step ((DCK Form No. 6 as per Appendices).

k. Members who are found violating the Byelaws of DCK during the course of construction will be charged as approved by DCK Authorities from time to time and these charges will be deducted from security deposit.

l. In case member intends to construct the building in phases, the sequence of construction in phases duly numbered shall be indicated on the submission drawing. For purpose of obtaining NOC of a building, the minimum requirement is completion of ground floor in all respect.

3.19.11 Deviations: All Construction activities shall be processed as per approved building plans. However, if owner desires to make any changes during the construction, than a deviation plan shall be submitted for approval of DCK Authorities prior to modification at site. Subsequent construction can proceed as per approved deviation plan. Any construction other than approved building plan or deviation plan shall be considered unauthorised and subject to penalty as per prescribed rates.

3.19.12 Completion of the Building:

3.19.12.1 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. DCK authorities may allow extension in time upto 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.

3.19.12.2 For Buildings designed on FAR and special purpose buildings, owner will get the completion time approved prior to start of the construction activities from DCK Authorities. If timelines are not approved specifically for a project than above mentioned completion time will be applicable and late completion penalty will be imposed accordingly.

3.19.12.3 In case member intends to construct the building in phases, the sequence of construction in phases duly numbered shall be indicated

on the submission drawings alongwith structural drawings (foundation plan) conforming the complete building design of all phases.

3.19.13 Completion Plan: The member shall submit completion plans to obtain a completion certificate within 30 days of completion of entire work. Any member not submitting completion drawings within due date will be liable to a penalty as per prescribed rates.

3.19.13.1 The documents to be attached with completion plan are as under. –

- **a.** 5 x set of drawings.
- **b.** Prescribed dues as decided by DCK Authorities from time to time.
- **c.** Inspection Card, duly signed by the concerned Officers.
- **d.** All respective forms for adherence to Byelaws & quality control in construction, respectively duly signed by the respective consultants as provided below:-
  - **1)** Architect (DCK Form No.2 as per Appendices),
  - **2)** MEP Consultant (Mechanical, Electrical, Plumbing) (DCK Form No. 3 as per Appendices)
  - **3)** Structural Engineer (DCK Form No. 4 as per Appendices)
  - **4)** Details of Alternate Energy Solutions Installed (DCK Form No. 11 as per Appendices) With Photographs,
  - **5)** Contractors certificate for structure stability
  - **6)** Fire Safety Precautions Adherence (DCK Form No. 12 as per Appendices)
- **e.** Two sets of Soft copy of drawings (1 x Pdf, 1 x AutoCad each).

3.19.13.2 After the receipt of completion drawings, DCK Authorities technical staff shall arrange to inspect such work and after inspection.

- **a.** In case of violations, completion plan shall be returned unsanctioned with an order for demolition of un-authorized construction.

b. In case of no violation, completion case shall be put up to the Completion Board of Officers detailed by DCK Authorities for final approval.

3.19.14 Occupancy of Building:

3.19.14.1 Buildings shall only be occupied after obtaining Occupancy Certificate which will be issued after approval of completion plan.

3.19.14.2 If the member wants to occupy partly completed building then he should submit completion plan as per the completed portion with an application showing justified reasons for subsequent occupation of the building.

3.19.14.3 For purpose of obtaining occupancy certificate of a building, the minimum requirement is completion of ground floor in all respects.

3.19.14.4 If member occupies the building without getting approval from DCK Authorities, penalty would be imposed as per prescribed rates.

3.19.14.5 Membership of respective DCK Sector Clubs will be granted after Occupancy Certificate as per the prescribe rates and membership certificate shall be required to be submitted with completion plan.

3.19.14.6 Illegal occupants and violators will not be entertained with social & civic facilities of DCK Authorities.

3.19.15 Addition, Alteration and Renovation of Building after Approval of Completion Plan and Execution of 'B' & 'C' Lease:

3.19.15.1 Such addition, alteration and renovation may be done to building after obtaining approval for proposed works from DCK Authorities. Addition and alterations, executed after the approval shall be followed by submitting completion plans and other required documents as per checklist.

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

In case any resistance in demolition of unauthorized construction, it shall be considered as illegal and plot file will be freezed by DCK Authorities for any further transactions till removal of violation.

3.19.15.3 In case of B/C lease of such premises is liable to be cancelled.

3.19.16 **Revised Building Plan:** Submission of revised building plans shall be mandatory in the following conditions:-

3.19.16.1 Structural changes required during construction.

3.19.16.2 After approval of completion plan, if changes / modification is more than 40% of total constructed area.

3.19.16.3 In case of time barred during construction.

3.19.17 **Revised Completion Plan:** Revised completion plan will be mandatory in following conditions:-

3.19.17.1 After approval of revised building plan.

3.19.17.2 After completing the partially constructed building.

3.20 All utility services such as water supply, sewerage system, sewer treatment plant, drainage, electricity, gas, telecom, internet, etc shall be developed by DCK Authorities, in due course of time directly or through other departments/organizations and the development charges for utility services the same shall be charged to the owner on pro-rata basis from time to time which shall be payable immediately by the owner of plots. In case of non-payment or delay in payment of development charges by the owner of the plots, the allotment/transfer may be cancelled on sole discretion of DCK Authorities**.**

3.21 Any plot owner who is not following the agreed payment schedule is liable to get his/her plot cancelled or re-located as per discretion of DCK Authorities.

3.22 For special plots, in case the party to whom the plots are allocated, are not following the agreed Construction plan (approved) construction schedule, allotment of such plots is liable to be cancelled.

3.23 **Use of Smart Grid and Net Metering in DCK:** DCK Authorities is Pakistan's First planned Sustainable and Smart City and as such Smart Grid & Net Metering is essential ingredient of its electrical network. All residents shall be required to use Smart Meters for Net Metering. All directives of NEPRA and other relevant regulating agencies shall be followed for Net Metering and Smart grid to inject local electricity generation through renewable energy. DCK will implement Smart Grid & Net Metering

installations as per Guidelines on the subject, issued from time to time by DHA Distribution Company.

3.24 Special Use Plot: Special use plot reserved for the specific purpose shall not be utilized for any other purpose.

3.25 Residential Plots: Residential plot shall not be utilized for any other purpose.

3.26 Commercialization of plots: Conversion of residential plot into commercial shall be allowed only according to a uniform commercialization policy formulated and revised from time to time with the approval of the Competent Authority through notification on the basis of comprehensive study of various urban areas under pressure for commercialization. Individual plots outside the policy will not be considered for commercialization. Procedure to be followed is as under:

3.26.1 DCK shall issue a public notice for the change of land use of the plots in accordance with the provisions of these Byelaws and the expenses shall be borne by the applicant.

3.26.2 DCK shall give due consideration to the objections from the public, if any, in light of the Byelaws

3.26.3 Final No Objection Certificate (N.O.C) of change of land use shall be issued by the DCK Authorities.

3.26.4 The applicant shall pay the prescribed fees and other charges to DCK.

Chapter IV Standards for Residential Buildings

4.1 General Conditions: The following conditions shall apply: -

4.1.1 No construction shall be allowed in the compulsory open space, hereinafter referred to as COS except a pergola for car porch in side COS, spiral stair in rear COS and a guardroom in front COS not exceeding 65 Sft with clear overall height up to maximum 8 ft above the floor of car porch (from 451 to 800 Sq yds plots).125 Sft with clear overall height up to maximum 8ft above the floor of car porch shall be allowed for guardroom with toilet (801 Sq yds and above). As mentioned in these Byelaws, additional guardroom may also be allowed as a special case.

4.1.2 Sub division shall not be permitted for any size of the plot.

4.1.3 Amalgamation of residential plots will only be permitted as under:

4.1.3.1 Amalgamation plots shall be allowed maximum upto four times the size of the original plot, provided that the original allotment conditions of the plots are similar, and COS will be applicable as per new size.

4.1.3.2 Prescribed fee of amalgamation will be charged.

4.1.3.3 Amalgamation of plots one constructed, one or both partly constructed, is allowed provided COS conditions of bigger size plot is met.

4.1.3.4 Amalgamation of plots both constructed is allowed by removing central wall, in this case COS of original plots will remain same.

4.1.4 Minimum size of car porch will be 10 ft x 14 ft.

4.1.5 Stairs/steps outside the boundary wall shall be strictly prohibited except ramp upto 4 ft (in horizontal length) and steps of wicket gate.

4.1.6 Erection of hoardings and antenna towers on residential buildings is strictly prohibited.

4.1.7 For odd or irregular shaped plots, the requirement of footprint area shall prevail over COS. However, COS in front shall be left as per provision of these Byelaws.

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

4.1.9 Detached car porch in front COS, where applicable, is allowed in cul-de-sac plots only.

4.1.10 For residential buildings, the maximum riser of stair steps shall be 7 inches and the minimum tread will be 11inches.

4.1.11 Swimming pool is permitted to be built on plots of 500Sq yds or above after fulfilling following conditions: -

4.1.11.1 Allowed to be constructed in the basements or on the first floor ensuring sound structural design duly certified and documented by the Registered Structural Engineer.

4.1.11.2 To be appropriately protected for privacy.

4.1.11.3 Not to be constructed in compulsory open space.

4.1.11.4 Change/shower room is mandatory.

4.1.11.5 Proper filtration plant will be installed.

4.1.11.6 Holding tank of appropriate capacity to be provided.

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

4.1.11.8 Removal of swimming pool water shall be done through bowzers by owner and water shall not be discharged in the municipal mains (sewerage and drainage lines). Pipe network for the same up to gate should be provided by the owner.

4.1.12 Placement of generators and electro-mechanical equipment with proper structural arrangements as may be required is allowed on the roof tops and anywhere in the front COS subject to sound structural design duly verified/certified and documented by registered structural engineer, provided the following is satisfied: -

4.1.12.1 Smokeless and noise free.

4.1.12.2 Sound resistance canopy.

4.1.12.3 Should have proper electro-mechanical connections of permanent nature.

4.1.12.4 Covering of the Generator having architectural element not exceeding boundary wall height and protruding maximum one foot on sides of Generator, may be allowed.

4.1.12.5 Anti-vibration pads should be provided under Generator.

4.1.13 Compulsory open space shall always be free from any erection or obstruction except following:

4.1.13.1 Boundary walls

4.1.13.2 Steps leading to ground floor.

4.1.13.3 Stairs leading into basement in the rear and side(s) COS not exceeding half the width of COS.

4.1.13.4 One/two columns and beams inside COS to support car porch, connecting the two picked up columns in line with boundary wall restricting the height of wall upto 10 ft from road level.

4.1.13.5 Car porch will be allowed as a special case in the side COS with a pergola (75% open) on it. However, covering of pergola with transparent material is allowed.

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

4.1.13.7 Guard room in front COS as per specified sizes of various plots.

4.1.13.8 Under ground water & septic tank.

4.1.13.9 Dog / Bird's cage in the front or rear COS.

4.1.13.10 Electric cabinet, motor / pump cabinet in the front COS. Covering of these having architectural element".

4.1.13.11 Covering of service pipes with architectural elements.

4.1.13.12 Covering of the Generator set having architectural element not exceeding boundary wall height and protruding maximum one foot on sides of Generator in front COS.

4.1.13.13 A wooden / metallic open stair in the rear COS to climb up to first floor and rooftop.

4.1.13.14 Water body, fountain, rockery, Bar BQ Counter, walk ways, elevated flower beds upto 2 ft in COS, not exceeding half the width of COS.

4.1.13.15 Benches, gazebo / canopy (temporary), rockery in front COS.

4.1.13.16 Water taps, ablution area and washing area in side COS, not exceeding half the width of COS.

4.1.13.17 Temporary covering having three sides open over the steps / air wells leading to basement/windows.

4.1.13.18 Swimming pools in front COS, where applicable as per these Byelaws.

4.1.13.19 Landscaping with plants.

4.1.13.20 Grill gates and railing for pets, etc. up to height of boundary wall.

4.1.13.21 Ramp leading into basement in the side COS leaving 3 ft spare towards boundary wall for COS connectivity.

4.1.13.22 Rear and back side COS up to maximum 50% of its width may be utilized for ventilation and light of the basement commonly termed as 'open to sky'. A fibre glass shade (3 sides open) may be constructed over the open well to stop the rain water. Stairs leading to basement may also be constructed in the open well. Side COS (not less than 10 feet) may also house the open well including stairs from the basement. In cases of plots where level difference is such that basement could be designed as lower ground floor, special permission may be granted by DCK Authorities for lowering the full COS of back and sides with proper design of services.

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

4.1.15 A water channel of cross-section 6ft X 6ft size will be constructed in line with a 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.

4.1.16 Construction of barsati with maximum of 6ft projection from the stair tower with three sides open is permitted.

4.1.17 In-house plumbing, electric, gas, ICT and alternate energy works should be executed from approved/licensed contractors.

4.1.18 Servant quarters shall not be allowed in compulsory open space. All servant quarters shall be part of the main building.

4.1.19 For any landscaping outside property line, permission shall be obtained from DCK authorities.

4.1.20 Kitchen, toilet and bathroom are allowed in basement with mechanical means of disposal and exhaust where required in houses.

4.1.21 Permission of overhead water tank above stair tower/ mumty above 39ft shall only be allowed if arrangements of solar water heater are submitted by the owner. The design should ensure with function and aesthetics.

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

4.1.23 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.

4.1.24 Any commercial activity including establishing the offices, parlours, tuition centre, etc. will NOT be allowed in the residential buildings.

4.1.25 Inter floor in residential units may be permitted on top of bathroom/dress provided the clear height below 7'-0".

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

4.1.26.1 Plots measuring 1000 Sq yds and above wherein provision of two main gates is allowed in Byelaws; if the variation in the plot levels between minimum and maximum exceeds 5 ft, then, any one gate may be planned against minimum level. If, however, level variation is less than 5 ft, both the gates would be placed according to the road in front.

4.1.26.2 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.

4.1.26.3 If the contour of a plot depicts level variation of 5ft and above, encompassing upto 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:

a. It does not interfere with the overall security system /master plan of the area.

b. It does not fall on the main road.

4.1.27 Owner of the plot (500 Sq yds and above) will make an arrangement by constructing an underground tank for collection of gray water, (after septic tank) which can be used for lawn, plants and flowerbeds etc.

4.1.28 The height of area between edge of the road and property line (residential / commercial) shall not be raised. Blocking of such area by placing stones / blocks is not permitted.

4.1.29 Construction of "Duplex" of any design is strictly prohibited on any size/type of plot.

4.1.30 No structure of any kind will be allowed on roof except Stair Case/Mumty, Over Head Water Tank, Solar Panels, Solar/Electric Water

Heaters. Any other alternative energy solution may be allowed subject to approval of DCK Authorities fulfilling all structural, safety and environmental requirements.

4.1.31 All alternative energy solutions shall not be considered in the overall height of the allowable height of the building.

4.2 Stair Tower: The area of stair tower shall be governed as under:-

Table 1: Area of Stair Tower

(1)	**Type of stairs**		**Plots upto 700 Sq yds**	**Plots of 701 Sq yds and above**
	(a)	Box Stairs	225 sqft	250 sqft
	(b)	Dogleg Stairs	180 sqft	200 sqft
	(c)	Straight Flight Stairs	150 sqft	180 sqft
	(d)	Spiral Stairs	120 sqft	150 sqft
(2)	The stair tower shall be strictly restricted to the periphery of stairs and in no case be utilized for any kind of living purpose.			
(3)	Construction of barsati with maximum of 6ft projection from the stair tower with three sides open is permitted.			

4.3 Open Stairs: Open stairs (Spiral or straight) would be allowed subject to the following: -

4.3.1 These stairs are provided for servant room located at first floor and for access to roof top for maintenance only.

4.3.2 Spiral stairs of 4'-6" dia or straight stair of 2'-6" width allowed in rear COS starting from building line for plots measuring 400 Sq yds and above. Stair tower / mumty cannot be constructed over these stairs.

4.4 Mumty: Mumty should be adjacent to the primary or secondary stair case. Mumty area may house, bed rooms with bathroom, storage, servant room including bathroom. No window will be allowed on sides of neighboring plot. Internal clear height of mumty will not be more than 8 ft from top of 1st floor slab.

Mumty shall only be allowed as an incentive to those plot owners as per the following two conditions:-

4.4.1 Cul De Sac Plots (Selected Sectors)

Room Size 14' x 16' with bathroom 8' x 10' (Maximum)

4.4.2 Plot owners who will provide atleast 30% of their electrical loads on alternate energy solutions. The details of mumty areas allowed in this condition:-

4.4.2.1 Plots from 500 sq yds and above – 400 Sft

4.4.2.2 Plots from 251 sq yds to 499 sq yds – 300 Sft

4.4.2.3 Plots 250 sq yds and below – 150 Sft

Note: Provision of mumty is an incentive and as such is only applicable in any one of the above two conditions. In no case, **both** incentives will be applicable at the same time.

4.5 Basement for Residential Plots: Basement shall be permitted upto allowable footprint of ground floor while ensuring safety of adjoining buildings. Any damage occurring to neighbouring property or the DCK property shall be made good by the owner or builder to the satisfaction of the DCK. Indemnity Bond shall be obtained from owner before issuing approval of building plan.

4.5.1 Additional basement may be permitted subject to ground conditions. In this case, owner shall be required to submit contour plan and photographs substantiating the requirement. In no case any commercial activity shall be allowed in basement(s).

4.5.2 In case of open basement or COS less than 5 ft, owner shall submit a method statement showing the precautionary measures to be taken by the owner for safe guarding the adjacent property and obtain an NOC from DCK, prior to any excavation activity.

4.5.3 Front COS will be left untouched.

4.5.4 Sides and rear COS may be dug till the plot line ensuring safety of the neighbouring property.

4.5.5 Construction of ramp, stairs/steps leading to the basement is permitted within in the side and rear COS without any super structure over them leaving 3ft clear space

4.5.6 Clear height of the basement shall not be less than 8 feet 6 inches and more than 10 feet.

4.5.7 Basement walls adjacent to completed houses should be completed within 15 days from the date of commencement of excavation.

4.5.8 All the retaining walls of the open/closed basement should be of RCC.

4.5.9 If services, such as bath and kitchen etc, are provided in the basement, the owner must provide mechanical disposal from the basement to the upper level in all cases (irrespective of levels of DCK AUTHORITIES mains), so that there is no possibility of back flow in case of choked sewer lines. DCK AUTHORITIES will not be responsible for the consequences in any case. Cost of additional services work shall be borne by the member.

4.5.10 Closed Basement, vaults, cellars and other structures, wholly or partly below the ground level/approach road level, shall be allowed by the Authority provided minimum 1 x Emergency exit is provided.

4.5.11 Parking in basement is allowed.

4.6 Entry Gates:

4.6.1 Position / Location of the gate(s) will be kept as per approved site plan.

4.6.2 Standard width of main gate including wicket gate excluding pillars should not be more than 20'. However, if member desires to increase the width, gate upto 25' may be allowed by paying additional subscribed charges as one time measure but services such as transformer, DBs etc would not be shifted.

4.6.3 For plots having level difference of 7 feet or above in frontage of 50 feet can change the main gate location after the approval from Competent Authority, however no services such as transformer, DBs etc will be shifted.

4.6.4 Additional gate with car porch and independent guard room shall be permitted only for plot measuring 1000 Sq yds and above on title road with special permission.

4.6.5 Additional gate may also be allowed in case of corner plots with special permission.

4.6.6 For corner plots measuring 500 Sq yds and above, additional gate shall be allowed up to 15 ft with special permission on the road other than the title road.

4.6.7 For corner plots measuring 300 Sq yds and above having COS on road side, additional gate shall be allowed upto 12 ft with special permission.

4.6.8 In no case, additional gate will be allowed on the main roads and roads bearing main traffic load connecting sectors.

4.6.9 Provision of any kind of arch / design element over the gate is not allowed.

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

4.7.1 Where no footpath exists, the ramp may be extended maximum up to the outer edge of drain kerb stone/plot line. The height of ramp at start of property line should be maximum 18" or in a slope of 1:7.The height of ramp would be taken from intersection of gate centre line & reference road crown.

4.7.2 Where footpath exists, the ramp start point may be taken from outer edge of footpath. The height of ramp at start of property line should be maximum 18" or in a slope of 1:7. The height of ramp would be taken from intersection of gate centre line & reference road crown.

4.8 Residential Buildings Standards: All residential houses or bungalows shall comply with the following standards: -

Table 2: Residential Building Standards

S. No	Area of Plot (Sq. Yds)	Allowable Covered Area	Front (ft)	Rear (ft)	Sides (ft)	No of Floors
1.	Upto 150	90%	4'-0"	-	-	B+G+1
2.	151 to 250	90%	5'-0"	-	-	B+G+1
3.	251 to 350	75%	5'-0"	3'-0"	5'-0" On one side only	B+G+1
4.	351 to 450	75%	8'-0''	4'-0''	5'-0" On one side only	B+G+1
5.	451 to 800	65%	10'-0"	6'-0"	5'-0"	B+G+1
6.	801 to 1800	55%	20'-0"	10'-0"	10'-0"	B+G+1
7.	1801& Above	50%	30'-0"	15'-0"	15'-0"	B+G+1

Note: Allowable covered area and COS will be governed by type and category of plot.

4.9 Minimum Residential Buildings Cubical Capacity Standards:

The following shall be minimum cubical capacity standards for residential buildings:

Table 3: Minimum Residential Buildings Cubical Capacity Standards

Description	Area (Sft)	Width (ft)	Clear Height (ft)
Living rooms	110	9'-6"	9'-6"
Kitchen	48	6'-0"	9'-6"
Powder Room	15	3'-0''	7'-6''
Bath room	24	4'-0"	7'-6"
W. C only	15	3'-0"	7'-6"
Servant room/quarter	80	8'-0"	9'-6"
Guard room(s) on the gate only	36	6'-0"	8'-0"
Passages, Corridors Galleries etc	-	3'- 6"	7'-6"
Main stair case	-	3'-6"	7'-0"

Notes:

1) Guard room at gate of plots from 451 to 800 Sq yds, maximum allowable area is 65 Sft.
2) Guard room at gate of plots from 801 Sq yds and above, maximum allowable area is 125 Sft.
3) Guard room at gate shall have a height of 8 ft.

4.10 Residential Buildings Height Standards: The following shall be the height standards for residential buildings:-

Table 4: Residential Buildings Height Standards

Description	Clear Height (ft)	
	Max	Min
Level of main gate (being opened on the main street/road) from the road level	1'-6"	1'-0"
Plinth Level (subject to contour of plot as defined in these Byelaws) from the road level	4'-0"	2'-0"
Ground Floor (Floor Level to Bottom of roof slab)	14'-0''	9'-6"
1st Floor	12'-0"	9'-6"
Height of main building (upto roof top slab)	31'-0"	22'-0"
Stair Tower	8'-0"	7'-0"
Stair Tower with elevator shaft and/or with water tank built over it	12'-0"	-
Over all height of building including stair tower with elevator shaft	43'-0"	30'-0"
Parapet Wall (Clear Height after Water Proofing & Insulation)	5'-0"	4'-0"
Parapet Wall for Attached Houses toward adjacent houses (Clear Height after Water Proofing & Insulation)	7'-0"	4'-0"
Boundary wall from crown level of the road	8'-0"	6'-0"
Clear height of basement	10'-6"	8'-0"

Note: 2 ft high iron protective barrier over boundary wall may be permitted by the Authority under special circumstances with the prescribed additional charges.

4.10.1 Structural design and vetting is compulsory for all types of residential buildings irrespective of height.

4.10.2 Specified charges will be levied by DCK for processing the case for vetting of Building Plans and Structural drawings. These rates are subject to the determination by the DCK from time to time.

Chapter V Standards for Commercial Buildings

5.1 Classification: In DCK, two types of buildings fall under activities, namely Commercial Buildings and Mixed Use Buildings. In Commercial Buildings, retail and office activities are allowed. Whereas, in Mixed Use Buildings, only on ground floor & basement, retail is allowed and on upper floors, only residential accommodation is allowed.

5.2 Standards for Commercial and Commercial Mixed Use Building:

5.2.1 Central Business Sub District: Following standards for Commercial and Commercial Mixed-Use Building in Central Business Sub District will be followed:

Table 5: Standards for Central Business Sub District

Plot Size (Sq.yds)	Footprint	COS (Width in ft)			FAR	Floors
		Front	Rear	Sides		
Upto 199	G.F = 100%	-	If building is having both sides 40 Sft compulsory ventilation duct		N/A	B+G+4
200 to 299						
300 to 399						
400 to 499	G.F = 85% Above G.F = 75%		7'-6"	5'-0" (one side)		
500 to 999	G.F = 80% Above G.F = 70%	8'-0"	8'-0"	5'-0"	1 : 5	N/A
1000 to 1999	G.F = 75% Above G.F = 65%	10'-0"	10'-0"	7'-0"	1 : 5.5	
2000 & above	G.F = 55% F.F to 4th Floor = 55% 5th Floor & Above = 20%		10'-0"	10'-0"	1 : 8	

Notes:

1) 7'-6" rear COS would be provided for 300-399 sq yds plots in case there is no road on the back side.
2) All foundations to be designed in a manner to ensure that they are not going inside other plots.
3) For 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^{o} with the horizontal (Not applicable on flag mast and communications equipment).

5.2.2 Central Market Sub District: Following standard will be followed in Central Market Sub District.

Table 6: Standards for Central Market Sub District

<table>
<tr><th rowspan="2">Plot Size (Sq.yds)</th><th rowspan="2">Footprint</th><th colspan="3">COS (Width in ft)</th><th rowspan="2">FAR</th><th rowspan="2">Floors</th></tr>
<tr><th>Front</th><th>Rear</th><th>Sides</th></tr>
<tr><td>upto 199</td><td rowspan="3">G.F = 100%</td><td rowspan="3">-</td><td colspan="2" rowspan="3">40 Sft compulsory ventilation duct</td><td rowspan="3">N/A</td><td rowspan="3">B+G+4</td></tr>
<tr><td>200 to 299</td></tr>
<tr><td>300 to 399</td></tr>
<tr><td>400 to 499</td><td>G.F = 85%
Above G.F = 75%</td><td>7'-6"</td><td>5'-0" (one side)</td></tr>
<tr><td>500 to 999</td><td>G.F = 80%
Above G.F = 70%</td><td>8'-0"</td><td>8'-0"</td><td>5'-0"</td><td>1 : 5</td><td rowspan="3">N/A</td></tr>
<tr><td>1000 to 1999</td><td>G.F = 75%
Above G.F = 65%</td><td rowspan="2">10’-0”</td><td>10'-0"</td><td>7'-0"</td><td>1 : 5.5</td></tr>
<tr><td>2000 & above</td><td>G.F = 60%
Above G.F = 55%</td><td>10'-0"</td><td>10'-0"</td><td>1 : 5.5</td></tr>
</table>

Notes:

1) 7'-6" COS would be provided on the back for 300-399 sq. yds plots in case there is no road on the back side.
2) All foundations to be designed in a manner to ensure that they are not going inside other plots.
3) For 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^{o} with the horizontal (Not applicable on flag mast and communications equipment).

5.2.3 Mixed Use Sub District: Following standard will be followed in Mixed Use Sub District.

Table 7: Standards for Mixed Use Sub District

<table>
<tr><th rowspan="2">Plot Size (Sq.yds)</th><th rowspan="2">Footprint</th><th colspan="3">COS (Width in ft)</th><th rowspan="2">FAR</th><th rowspan="2">Floors</th></tr>
<tr><th>Front</th><th>Rear</th><th>Sides</th></tr>
<tr><td>Upto 199</td><td rowspan="3">G.F = 100%</td><td rowspan="3">-</td><td colspan="2" rowspan="3">40 Sft compulsory ventilation duct</td><td rowspan="3">-</td><td rowspan="3">B+G+4</td></tr>
<tr><td>200 to 299</td></tr>
<tr><td>300 to 399</td></tr>
<tr><td>400 to 499</td><td>G.F = 85%
Above G.F = 75%</td><td>7'-6"</td><td>5'-0" (one side)</td><td>-</td><td>B+G+4</td></tr>
<tr><td>500 to 999</td><td>G.F = 80%
Above G.F = 70%</td><td rowspan="3">8'-0"</td><td>8'-0"</td><td>5'-0"</td><td>1 : 5</td><td>B+G+4</td></tr>
<tr><td>1000 to 1999</td><td>G.F = 75%
Above G.F = 65%</td><td>10'-0"</td><td>7'-0"</td><td>1 : 5.5</td><td rowspan="2">-</td></tr>
<tr><td>2000 & above</td><td>G.F = 60%
Above G.F = 55%</td><td>10'-0"</td><td>10'-0"</td><td>1 : 5.5</td></tr>
</table>

Notes:

1) 7'-6" COS would be provided on the back for 300-399 sq. yds plots in case there is no road on the back side.
2) All foundations to be designed in a manner to ensure that they are not going inside other plots.
3) For 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° with the horizontal (Not applicable on flag mast and communications equipment).

5.2.4 Commercial and Mixed Use Building: Following standards in Residential Districts for Commercial and Mixed Use Building will be followed :-

Table 8: Standards for Commercial and Mixed Use Building

Plot Size (Sq.yds)	Footprint	COS (Width in ft)			Floors
		Front	Rear	Sides	
Upto 199	G. F = 100%	-	40 sq ft ventilation duct except where adequate and permanent mechanical ventilation is provided which discharges air into open space.		B+G+4
200 to 299					
300 to 399					
400 to 499	G.F = 85% Above G.F = 75%		7'-6"	5'-0" (one side)	
500 to 999	G.F = 80% Above G.F = 70%	8'-0"	8'-0"	5'-0"	
1000 to 1999	G.F = 75% Above G.F = 65%	8'-0"	10'-0"	7'-0"	
2000 & Above	G.F = 60% Above G.F = 55%	8'-0"	10'-0"	10'-0"	

Notes:

1) 7'-6" COS would be provided on the back for 300-399 sq. yds plots in case there is no road on the back side.
2) All foundations to be designed in a manner to ensure that they do not go inside other plots.
3) In case mechanical ventilation is provided in the design, the same should be substantiated with calculations for approval.

5.2.5 Commercial and Mixed Use Buildings Height Standards In Residential Districts: The following shall be height standards for Commercial and Mixed Use buildings in residential district: -

Table 9: Height Standards for Commercial and Mixed Use Building in Residential District

Description		Height (ft)	
		Max	Min
Plinth level subject to contour of plot as defined in these Byelaws		4'-0"	2'-0"
Ground floor including slab (Above the plinth)		14'-0"	10'-0"
1st Floor and subsequent floors including slab		12'-0"	10'-0"
Parapet Wall		5'-0"	3'-6"
Height of Main Building including parapet wall (B+G+4)		71'-0"	55'-6"
Stair tower including slab		8'-6"	8'-0"
Stair tower including lift well		13'-0"	10'
Over All height of building is applicable to standard size plots or the amalgamated plots created there from (B+G+4)	With Lift Well	79'-6"	65'-6"
	Without Lift Well	84'-0"	63'-6"
Level of Arcade from crown of road (Varies from 8 to 12 ft in width)		3'-6"	1'-6"
Ceiling height of basement without obstruction		10'-0"	8'-0"
Min clear height of basement for parking without obstruction		8'-6"	7'-6"

Note: DCK Authorities may allow increase in Height of Ground Floor including slab i.e. more than 14 ft subject to Architectural requirement of the building, applicable for FAR buildings.

5.3 General Conditions: The following conditions shall apply to all commercial and mixed use buildings: -

5.3.1 Commercial Buildings:

5.3.1.1 Each building shall have central main entry at ground level from title road/street.

5.3.1.2 Minimum floor area of a shop on ground floor shall be 200 Sft and a minimum width of 12 ft whereas first floor onward only offices shall be allowed.

5.3.1.3 Minimum size of an office shall be 300 Sft.

5.3.1.4 Staircase:

5.3.1.4.1 Dimensions. The riser of stair in commercial building should not be more than 7 inches and the tread should not be less than 11 inches.

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

5.3.1.4.3 Winders are strictly prohibited.

5.3.1.4.4 All Stairs shall be provided with one landing after maximum of 15 risers.

5.3.1.5 3'-0" wide projections are permitted starting from first floor upward with 16 ft clear height from road level. Front projections falling on the main roads and streets (having width of 50 ft. and more) may be utilized as habitable areas. Rear projections will stay in the form of balconies and can also house the landing of stairs, at a vertical height of 16 feet from the adjacent road.

5.3.1.6 Provision of elevators is compulsory for all buildings. Minimum lift requirements and specifications shall be as per following standards:-

5.3.1.6.1 Capacity / Numbers Required: Numbers of elevators shall be such that the combined capacity should be able to transport at least half of buildings (approximate) population (Approximate population of a building shall be estimated @ on the scale as one (1) person per 100 Sft) as following:-

a. For buildings on plots upto 399 sq yds, minimum one elevator is required (to be used for passenger/freight).

b. For buildings on plots from 400 sq yds upto 599 sq yds minimum two elevators are required (1 each for passenger and freight).

c. For buildings on plots 600 sq yds and above, following shall be used as 5 trips for buildings up to 12 storeys and 10 trips for buildings more than 12 storeys.

5.3.1.6.2 **Location:** At least one elevator shall be located within 100 ft of any point on respective floor.

5.3.1.7 Corridors or passages shall be minimum 6 ft wide.

5.3.1.8 At least two emergency stair cases are required to be provided in building on for plots sizes of 400 sq. yds and above. However, plots larger than 600 sq yds stair cases shall be provided as required in Building Code of Pakistan – Fire Safety Provisions – 2016.

5.3.1.9 Structural design and vetting is compulsory for all types of Commercial,Mixed Use and Special Use Buildings irrespective of height.

5.3.1.10 For plots abutting on park, COS may be condoned on speical approval, however, opening of shop will not be allowed.

5.3.1.11 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 annually.

5.3.1.12 Lightening Conductor shall be provided for all buildings.

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

5.3.1.14 Industrial and semi industrial activities are not allowed.

5.3.1.15 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.

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

5.3.1.17 Placement of generators, electromechanical equipment and solar energy plant, 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:-

a. Shall have proper mountings / padding to absorb vibrations.

b. Limited smoke and noise should come.

c. Should have a sound proof canopy.

5.3.1.18 Amalgamation of commercial plots will be permitted. However, construction on amalgamated plots would be permitted as per the applicable Byelaws of the original plot area.

5.3.1.19 **Stair Tower/Lift Well:** In case of amalgamated plots measuring 500 sq yds and above, construction of additional stair towers will be permitted.

Area of stair tower/Lift well shall be governed by the following (stair arrangements will be made accordingly):-

Table 10: Area of Stair Tower/Lift Well

Type			Plots upto 399 sq yds	Plots of 400 sq yds and above
(1)	(a)	Box Stairs (Minimum)	200 sqft	220 sqft
	(b)	Dogleg Stairs (Minimum)	180 sqft	200 sqft
(2)	Lift Well (Maximum)		100 sqft	100 sqft
(3)	The stair tower shall be strictly restricted to the periphery of stairs and in no case be utilized for any kind of living purpose.			

5.3.1.20 Fixing of tandoor/ kitchen/ bakery, etc., in shops of commercial area will be allowed provided following conditions are fullfiled:

a. Only one tandoor per 100 sq ft area of the shop will be permitted.

b. Proper exhaust arrangements for disposal of smoke and hot gases have been made by ensuring that exhaust duct is going upto the height of the building. In case tandoor/ kitchen/ bakery, etc., is made after the completion of the building, exhaust duct duly encased in cladding of approved material shall be provided.

5.3.1.21 Kitchens, tandoor, bar beque and any type of cooking shall not be allowed in any basement.

5.3.1.22 Shops shall be allowed in the basement, subject to a proper arrangment for natural light and ventilation, fulfilling one of the following:

a. Access to basement will be from front through common corridor running in front of shops at basement remaining within property line.
b. A common corridor will be provided for the shops at ground floor in front of all shops.
c. Ground floor shops can be interlinked with basement shops through proper stairs within the shop areas.

5.3.1.23 A compulsory ventilation duct, 40 sq ft, from first floor upward would be provided except where adequate and permanent mechanical ventilation is provided which discharges into open space, if the facilities like kitchen and bathrooms etc are located in the inner part of the building. If, however, these facilities are located in such a manner that ventilation / natural light are available to these, then the provision of duct may be done away with. However, in case a restaurant is provided on ground floor it must have an exhaust duct going up to the roof level.

5.3.1.24 Trade license for any commercial activity shall be required to be taken from DCK Authorities.

5.3.1.25 Special permission will be mandatory from DCK Authorities for the following:-

a. Tandoor
b. Grinding machine for flour
c. Motor Vehicle workshops
d. Car washing
e. Wheel balancing/alignment
f. Puncture/tyre shop
g. Welding shop
h. Pet animal/bird shop
j. Chicken/meat shop
k. LPG and Gas Cylinder shop

5.3.1.26 Structure of commercial buildings to have inbuilt safety features against seismic threat, basedon 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 shall be made by the structure engineer duly signed by him as follows: -

a. For buildings upto G + 20 : "the structure is designed as per the required parameters of Zone-2B Building Codes of Pakistan and UBC-1997 and ACI-318-95, ASCE7-95."

b. For buildings above G + 20 : "the structure is designed as per the required parameters of Zone-2B Building Codes of Pakistan and IBC-2016."

5.3.1.27 All buildings above G + 4 will mandatorily use ready mix concrete with pumps.

5.3.1.28 A service floor may be allowed in high rise buildings (designed as per FAR). It's area shall not be counted in covered area and height of the building shall not be more than the allowable maximum height.

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

5.3.1.30 Erection of hoardings or any kind of advertisement on the front, rear or sides on buildings in DCK is strictly prohibited.

5.3.1.31 Swimming pools are permitted to be built after giving following undertaking: -

a. Proper filtration plant will be installed.
b. To be properly designed ensuring structural stability.
c. Swimming pool to be appropriately protected for privacy.
d. Not to be constructed in compulsory open space.
e. Any damage caused to neighbouring structure will be made good by owner constructing swimming pool.
f. Proof of carrying out complete water proofing.
g. Change Rooms are provided with swimming pool.
h. In case pool is located on the roof top, toilet and change room shall be allowed on roof top provided they are within the allowable covered area / FAR and within the height restriction (where applicable).

5.3.1.32 In commercial buildings where FAR is applicable, a minimum of 10% of the mandatory open space shall be properly landscaped. This landscaped space shall be left open to sky and shall not be used for parking of vehicles.

5.3.1.33 Plumbing, Electric, Sui gas, Internet/network and telephone works should be executed from approved/licensed contractor registered with DHA.

5.3.1.34 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 be:

a. Be vertical for the whole length

b. Has an internal diameter of not less than 24 inch.

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

5.3.1.36 Strict adherence of firefighting, fire prevention, fire escape and fire alarm code shall be required which includes but not limited to the 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 Provisions 2016.

5.3.1.37 All utilities services (Water supply, Sewerage system, Sewer Treatment plant, Drainage, Electricity, Gas, Telecom, Internet, etc.) shall be developed by DCK, in due course of time, directly or through other departments / organizations; and the Development charges for the same shall be charged to the owner on pro-rata basis from time to time which shall be payable immediately by the owner of plots. In case of non-payment or delay in payment of Development charges by the owner of plots, the allotment / transfer/may be cancelled or no further transaction of subject plot will be executed on sole discretion of DCK.

5.3.1.38 No boundary wall / fence / guard-room / gates shall be allowed for any plot / building. A common façade policy to provide rhythm and harmony shall be applicable for all buildings as per the DCK Bye-Laws for Sustainable Master Plan and Image Concept (SMPIC). DCK will approve the façade & elevation of each building (at the time of submission of plans).

5.3.1.39 Commercial, Mixed-Use and all Buildings shall be required to have facade cleaning done periodically. For buildings, where FAR is

applicable facade cleaning system is mandatory and its design shall be included in submission plan.

5.3.1.40 No retail sign boards are allowed. Only name of the building may be displayed on façade of the building.

5.4 Special Conditions:

5.4.1 All commercial buildings shall incorporate / install CCTV cameras in both inner and outer periphery of the building which could be linked with DCK ICT/Security System.

5.4.2 Additional precautionary measures including Gas Alarm System to be taken wherever any Gas Cylinder or relevant facility is provide in the building.

5.4.3 Periodic check / inspections of Electric and Gas utilities by concerned Government and DCK departments.

5.4.4 All commercial buildings shall use double glazed glass system with external glass colour to match the scheme of the particular sector (similar facade element) conforming minimum 60% reflective, high performance glass. All double glazed window spacers should be of aluminium.

5.4.5 It is mandatory to use tempered glass to avoid accidents.

5.5 Basement for Commercial Building Plots:

5.5.1 Construction of basement(s) will be permitted upto allowable footprint of ground floor.

5.5.2 Driveway ramp from 1st basement to lower basement shall be constructed within the footprint area.

5.5.3 Construction of more than one basement will be permitted subject to sound structural design and safety of neighbouring / adjoining buildings duly verified / certified and recorded by registered structural engineer.

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

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

5.6 Standards for Petrol Pumps and C.N.G. Stations: Petrol pumps and CNG stations are only allowed in the designated commercial plots in DCK Master Plan for this purpose.

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

5.6.2 The minimum area of a petrol station used for petrol filling facilities and servicing activities shall not be less than 800 sq yds.

5.6.3 The minimum area of a CNG station shall not be less than 600 sq yds.

5.6.4 Access roadways of petrol or CNG station shall be constructed in accordance with the following requirements:-

5.6.4.1 No Access roadway should cross the sidewalk at an angle of more than 45 degrees.

5.6.4.2 The width of each lane shall be at least 12 ft.

5.6.4.3 Both "in" and "out" roadways shall be provided, respectively for leaving and entering the approach traffic lane at an angle of not more than 45 degrees.

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

5.6.6 In addition to lavatory provided for the staff, atleast one lavatory shall be provided each, for ladies and gents, at petrol or CNG station exclusively for public use.

5.6.7 All requirements for fire fighting and fire prevention as laid down in Building Code of Pakistan – Fire Provisions 2016 shall be followed for all Petrol Pumps / CNG Stations.

5.6.8 On an existing petrol pump, CNG facility shall be allowed only if the area is 1000 Sq yds or more.

5.6.9 A single storey office and retail mart or shop shall be permitted on an area not exceeding 5% of the plot area in addition to the tyre and puncture shop, telephone booth and drinking water facility.

5.6.10 All building structures shall be constructed leaving a COS of at least 10 ft from the boundary of the plot of the petrol or CNG stations or according to standards of Explosives Department whichever is more.

5.6.11 Distance between two dispensers shall not be less than 24 ft.

5.6.12 Distance between dispenser and road edge shall not be less than 18 ft.

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

5.6.14 The compressor station shall be located at a minimum distance of 5 ft inside from the boundary walls and all measures provided in CNG Safety Rules, 1992, as amended from time to time will be implemented.

5.7 Mumty (Incentive for alternate energy usage):

5.7.1 Mumty should be adjacent to the primary or secondary stair case.

5.7.2 Mumty area may house, storage, building attendant room including bathroom.

5.7.3 No window will be allowed on sides of neighboring plot.

5.7.4 Internal clear height of mumty will not be more than 8 ft from top of last floor slab.

5.7.5 Mumty shall only be allowed as an incentive to those plot owners of Commercial and Mixed Use Commercial Buildings who will provide atleast 30% of their electrical loads on alternate energy solutions. The details of mumty areas allowed in this condition is as following:-

5.7.5.1 Plots 250 Sq yds and below – 150 Sft

5.7.5.2 Plots from 251 sq yds to 499 sq yds – 300 Sft

5.7.5.3 Plots from 500 sq yds and above – 400 Sft

Chapter VI Standards for Special Purpose Buildings

6.1 General Conditions:

6.1.1 Any excess area in the FAR will be charged for as per prescribed additional development charges

6.1.2 Basement if not utilized for parking, its area will be counted against FAR.

6.1.3 Basement will be permitted over the entire foot print area.

6.1.4 Basement may be utilized for laboratories, however, separate emergency exits will be provided.

6.1.5 Placement of generators and electromechanical equipment and solar energy (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.

6.1.6 Boundary wall will not be constructed in Education District and Medical units i.e. each Education setup as well as Medical will not have its boundary wall.

6.1.7 For plots which are bigger than 4 Acres, main entrance from the road should be planned in such a way that queue length of atleast five vehicles should be within the plot limit to avoid vehicle blocking the main road.

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

6.1.9 Facilities related to the purpose (like small canteen/tuck shop and medical stores/floral shops etc.), if planned, shall remain part of the main building.

6.1.10 Special purpose plots neither shall be converted nor shall be utilized for any other purpose than the allotted.

6.1.11 Proper ramps/entrance shall be made for entrance/exit of handicapped persons.

6.1.12 Special use plots shall not be considered for subdivision. However, amalgamation may be allowed under special conditions by competent Authority.

6.2 Standards for Masajid:

6.2.1 Building plans of Masajid shall be considered for B+G+2 floor on case-to-case basis.

6.2.2 Reasonable residential area for Khateeb and Moazzan not exceeding 1000 Sft may be allowed.

6.2.3 Adequate provisions shall be made for handicapped persons at entrance/exit in the shape of ramp.

6.3 Standards for Special Purpose Buildings in Sectors: Special purpose buildings shall observe the following standards:-

Table 11: Standards for Purpose Buildings in Sectors

Type of plot	Plot Sizes (Sq.yds)	FP (Max)	FAR	Minimum COS (ft)				Height
				Front	Sides		Rear	
					Right	Left		
Educational	Less than 1500	60%	1: 2	10	8	8	6	As per FAR
	1501 to 6500	50%	1:2.5	10	10	10	8	
	6501 to Above	50%	1: 2.5	10	10	10	8	
Health	All Sizes	50%	1:2.5	10	8	8	6	
ICT	All Sizes	60%	1:2.5	15	10	10	10	
Other Special Purpose Buildings	Less than 1000	50%	1:1.5	18	10	13	10	
	1000 & above	60%	1:2	10	10	10	10	

6.4 Height Standards for Special Purpose Buildings in Sectors:

Special purpose plots shall observe the following standards:-

Table 12: Height Standards for Special Purpose Buildings in Sectors

Description	Clear Height (ft)	
	Maximum	Minimum
Level of main entrance (being opened on the main street/road)	4'-0"	2'-0"
Plinth level subject to contour of plot as defined in these Byelaws	5'-0"	3'-0"
Ground Floor including slab (above the plinth)	14'-0"	10'-0"
1st Floor and subsequent floors (including slab)	13'-0"	10'-0"
Parapet Wall	4'-0"	3'-0"
Height of Main Building excluding parapet wall (G+2)	45'-0"	-
Stair tower with lift machine room and / or with water tank built over it	16'-0"	13'-0'
Over all height of special use building including stair tower with lift machine room and / or water tank	61'-0"	-
Height of two additional floors having 13'-0" max clear height each including slab	26'-0"	20'-0" (10'-0“ each floor)
Overall Height of Main building with two additional floors	87’-0”	-
Boundary wall from crown of the road	8'-0"	6'-0 "
Ceiling height of basement without obstruction	10’-0"	8'-6"
Clear height of basement for parking without obstruction	8’-6"	7’-6"

6.5 Height Standards for Special Purpose Buildings in Sectors– Education and Health:

Table 13: Height Standards for Special Purpose Buildings in Sectors – Education & Health

Description	Clear Height (ft)	
	Maximum	Minimum
Level of main entrance (being opened on the main street/road)	5'-0"	2'-0"
Plinth level subject to contour of plot as defined in these Byelaws	5'-0"	1'-6"
Ground Floor including slab (above the plinth)	16'-0"	12'-0'
1st Floor and subsequent floors (including slab)	15'-0"	12'-0'
Parapet Wall	5'-0"	4'-0"
Height of Main Building excluding parapet wall (G+5)	96'-0"	-
Stair tower with lift machine room and / or with water tank built over it	16'-0"	13'-0"
Over all height of Education Building including stair tower with lift machine room and / or water tank	109'-0"	-
Boundary wall from crown of the road	8'-0"	6'-0"
Ceiling height of basement without obstruction	10'-0"	8'-6"
Clear height of basement for parking without obstruction	8'-6"	7'-6"

6.6 Height Standards for Special Purpose Buildings in Sectors – ICT:

Table 14: Height Standards for Special Purpose Buildings in Sectors – ICT

Description	Clear Height (ft)	
	Maximum	Minimum
Level of main entrance (being opened on the main street/road)	1'-6"	1'-0"
Plinth level subject to contour of plot as defined in these Byelaws	4'-0"	2'-0"
Ground Floor including slab (above the plinth)	16'-0"	12'-0''
1st Floor and subsequent floors (including slab)	15'-0"	12'-0"
Parapet Wall	5'-0"	3'-6"
Height of Main Building excluding parapet wall (G+4)	80'-0"	-
Stair tower with lift machine room and / or with water tank built over it	16'-0"	13'-0"
Over all height of ICT Building including stair tower with lift machine room and / or water tank	96'-0"	-
Height of two additional floors having 12'-0" max clear height each including slab	24'-0"	-
Over all Height of building with two additional floors	120'-0"	-
Boundary wall from crown of the road	8'-0"	6'-0"
Ceiling height of basement without obstruction	10'-0"	8'-6"
Clear height of basement for parking without obstruction	8'-6"	7'-6"

6.7 Standards for Special Buildings in Healthcare and Educational District:

6.7.1 Following additional conditions shall also be applicable to buildings related to Health and Education in Healthcare District and Educational District respectively:

6.7.1.1 Compound wall shall not be allowed on property lines.

6.7.1.2 In case where a number of blocks are designed within the plot boundary, open space in between two blocks on front and rear sides shall be minimum 20 ft.

6.7.1.3 In all buildings a minimum of 10% of the mandatory open spaces shall be properly landscaped. This landscaped space shall be left open to sky and shall not be used for parking vehicles.

6.7.1.4 In case a hospital (50 Beds and above) is constructed, all requirements as laid down by Environmental Protection Agency, Pakistan and Sindh Environmental Protection Agency are to be followed, including the following important points:

6.7.1.5 Water, waste water, grey water, sewerage, radiation, toxic gases, disposal of hospital waste, etc.

6.7.1.6 Each hospital shall provide its own treatment plant to ensure that no infected material is going into municipal waste water disposal network.

6.7.1.7 All kinds of hospital and medical waste shall be safely collected, transported and disposed-off:-

- **a.** In accordance with the public health standards as prescribed by Sindh Environmental Protection Agency.
- **b.** Disposal of medical waste as per National Environmental Quality Standards (NEQS).
- **c.** All requirements as laid down by Environmental Protection Agency, Pakistan and Sindh Environmental Protection Agency are to be followed.
- **d.** In addition to above, as per full satisfaction of DCK.

6.7.1.8 In case a hospital (50 Beds and above) is constructed, all requirements of Pakistan Atomic Energy Commission shall be fulfilled especially for radiation, etc.

- **a.** In case a hospital (50 Beds and above) is constructed, all required certifications from Pakistan Atomic Energy

Commission and Environmental Protection Agencies are required to be taken and copies to be submitted to DCK for their record.

b. In case any institute wants to use dark colour in building elevations which are not as per the ambience policy of DCK, in such a case they will only use dark colour as datum maximum upto 30% of any elevation of any building.

c. All hospitals shall provide incinerator or other means of hospital waste disposal and ensure that it should be properly designed with respect to its orientation which do not causes any effect on residents of nearby vicinity.

d. Dedicated parking for institution/ hospitals should be provided within the premises as per the required numbers based on the planned capacity. Major or associated roads shall not be utilized for car parking.

6.8 Standards for Healthcare City Buildings:

Table 15: Standards for Healthcare City Buildings

S. No	Types of Plots	Footprint	FAR	COS (in feet)			Floors
				Front	Sides	Rear	
1	Plot Size 4840 Sq yds & Above	G.F = 60% Above G.F = 50%	1:5	20'-0"	20'-0"	20'-0"	As per FAR
2	Plot Size less than 4840 Sq yds	G.F = 70% Above G.F = 60%	1:5	10'-0"	10'-0"	10'-0"	As per FAR

6.9 Standards for Sports / Entertainment / Recreational Facilities:

Special use plots allocated for sports/entertainment and recreational facilities to have these Byelaws parameters: -

6.9.1 Foot Print Area - 50%

6.9.2 Building configuration - B+G+4

6.9.3 Swimming pool can be either in basement or on any other floor ensuring adequate structural design.

Chapter VII Handicapped Accessibility

7.1 DCK Authorities would like to ensure that all DCK Commercial and Mixed Use Buildings have Handicap Accessibility Compliant. In this regard, Building Plans will not be approved for any building in DCK except houses, unless they are fulfilling all the requirements of Handicap Accessibility.

7.2 Symbols of Accessibility:

7.2.1 Facilities and elements required to be identified as accessible shall use the international symbol of accessibility. The symbol shall be displayed as shown in following Figures.

7.2.2 Volume Control Telephones. Telephones required to have a volume control shall be identified by a sign containing a depiction of a telephone handset with radiating sound waves.

7.2.3 In case, telephone booth is provided in a facility then above facilities should be incorporated:

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

7.3.1 Width

The minimum clear width of an accessible route shall be 3ft (915 mm) except at doors. A person in a wheelchair must make a turnaround obstruction, the minimum clear width of the accessible route shall be as shown in following Figure 1: Accessible Route 90 Degree Turn and Figure 2: Accessible Route Turns around an Obstruction.

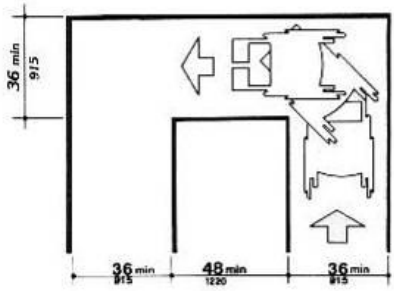


Figure 1: Accessible Route 90 Degree Turn

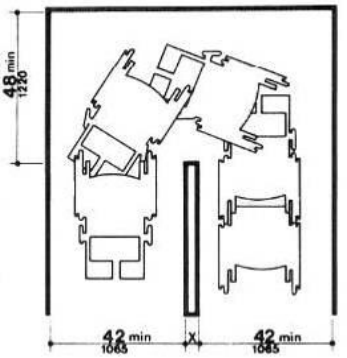


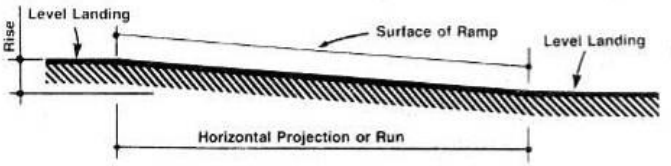
Figure 2: Accessible Route Turns around an Obstruction

Note: Dimensions shown apply when x < 48 in (1220 mm)

7.4 Ramps

7.4.1 General: Any part of an accessible route with a slope greater than 1:20 shall be considered a ramp.

7.4.2 Slope and Rise: The least possible slope shall be used for any ramp. The maximum slope of a ramp in new construction shall be 1:12. The maximum rise for any run shall be 2.5 ft (760 mm) (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.



	Maximum Rise		Maximum Horizontal Projection	
Slope	in	mm	ft	m
1:12 to < 1:16	30	760	30	9
1:16 to < 1:20	30	760	40	12

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

7.4.3 Clear Width: The minimum clear width of a ramp shall be 3 ft (915 mm).

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

7.4.4.1 The landing shall be at least as wide as the ramp run leading to it.

7.4.4.2 The landing length shall be a minimum of 5 ft (1525 mm) clear.

7.4.4.3 If ramps change direction at landings, the minimum landing size shall be 5 ft by 5 ft (1525 mm by 1525 mm).

7.4.5 Handrails: If a ramp run has a rise greater than 6 inches (150 mm) or a horizontal projection greater than 6 ft (1830 mm), then it shall have handrails on both sides. Handrails are not required on curb ramps or adjacent to seating in assembly areas. Handrails shall have the following features:

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

7.4.5.2 If handrails are not continuous, they shall extend at least 1 ft (305 mm) beyond the top and bottom of the ramp segment and shall be parallel with the floor or ground surface (see Figure 4: Examples of Edge Protection and Handrail Extensions below).

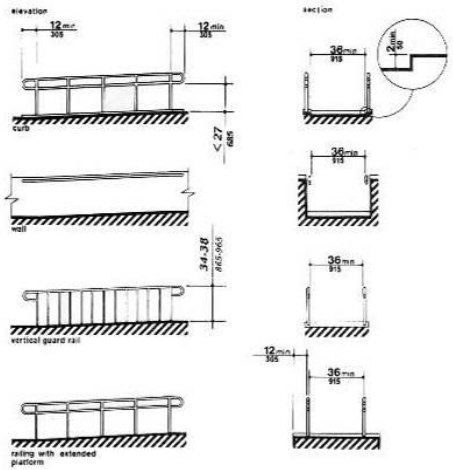


Figure 4: Examples of Edge Protection and Handrail Extensions

Note:

7.4.5.2.1 The clear space between the handrail and the wall shall be 1.5 inches (38 mm).

7.4.5.2.2 Gripping surfaces shall be continuous.

7.4.5.2.3 Top of handrail gripping surfaces shall be mounted between 2.83 ft and 3.16 ft (865 mm and 965 mm) above ramp surfaces.

7.4.5.2.4 Ends of handrails shall be either rounded or returned smoothly to floor, wall, or post.

7.4.5.2.5 Handrails shall not rotate within their fittings.

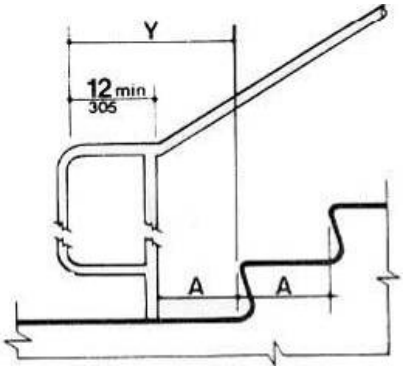


Figure 5: Stair Handrails - Extension of Bottom of Run

(Note: X is the 12 inches minimum handrail extension required at each top riser. Y is the minimum handrail extension of 12 inches plus the width of one tread that is required at each bottom riser)

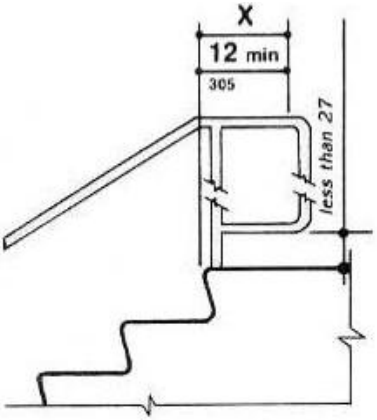


Figure 6: Stair Handrails - Extension of Top of Run

(Note: X is the 12 inches minimum handrail extension required at each top riser. Y is the minimum handrail extension of 12 inches plus the width of one tread that is required at each bottom riser)

7.4.5.2.6 The clear space between handrails and wall shall be 1.5 inch (38 mm).

7.4.5.2.7 Gripping surfaces shall be uninterrupted by newel posts, other construction elements, or obstructions.

7.4.5.2.8 Top of handrail gripping surface shall be mounted between 2.83 ft and 3.16 ft (865 mm and 965 mm) above stair nosing.

7.5 Elevators:

7.5.1 General: Elevators shall be on an accessible route and shall comply with the ASME A17.11990, Safety Code for Elevators and Escalators. Freight elevators shall 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.

7.5.2 Traction Belts: Traction belts consist of thin metal cables sheathed with rubber or polyurethane Traction belts are flexible.

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

7.5.2.2 Hand rail not less than 600 mm long at 900 mm above the floor level shall be fixed adjacent to the control panel.

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

7.5.3 Automatic Operation: Elevator operation shall be automatic. Each car shall be equipped with a self-levelling feature that will automatically bring the car to floor landings within a tolerance of 0.5 inch (13 mm) under rated loading to zero loading conditions. This self-levelling feature shall be automatic and independent of the operating device and shall correct the over-travel or under-travel.

7.5.4 Hall Call Buttons: Call buttons in elevator lobbies and halls shall be centered at 3.5 ft (1065 mm) above the floor. Such call buttons shall have visual signals to indicate when each call is registered and when

each call is answered. Call buttons shall be a minimum of 0.75 inch (19 mm) in the smallest dimension. The button designating the up direction shall be on top. (See Figure 7: Car Control Panels Detail). Buttons shall be raised or flush. Objects mounted beneath hall call buttons shall not project into the elevator lobby more than 3.75 inch (100 mm).

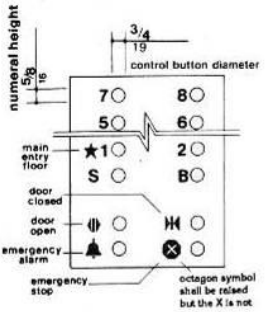


Figure 7: Car Control Panels Detail

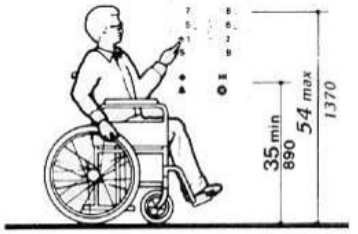


Figure 8: Car Control Height

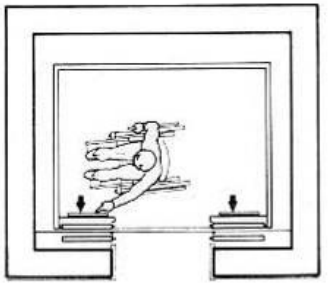


Figure 9: Car Controls - Alternate Locations of Panel with Center Opening Door

7.5.5 Floor Plan of Elevator Cars: The floor area of elevator cars shall 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 shall 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 shall be no greater than 1.25 inches (32 mm).

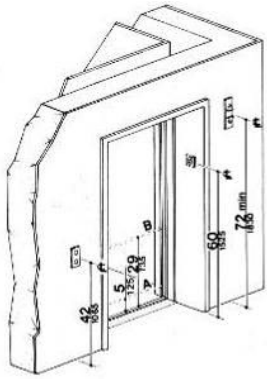


Figure 10: Hoist-way and Elevator Entrances

(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.)

7.6 Doors: Doorways shall have a minimum clear opening of 2.67 ft (815 mm) 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 ft (610 mm) in depth.

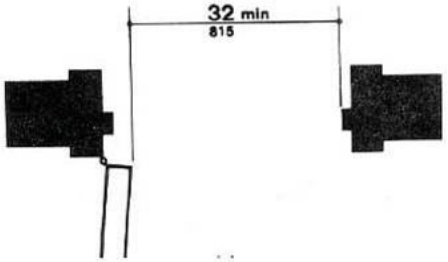


Figure 11: Clear Doorway Width and Depth Detail

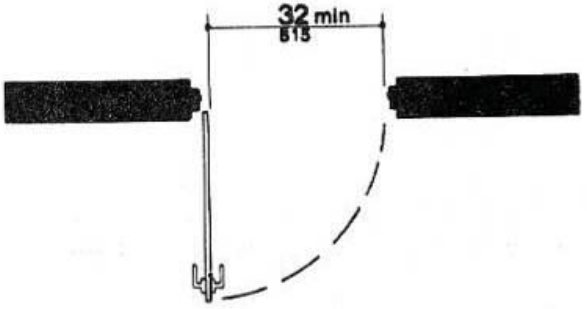


Figure 12: Clear Doorway Width and Depth Hinged Door

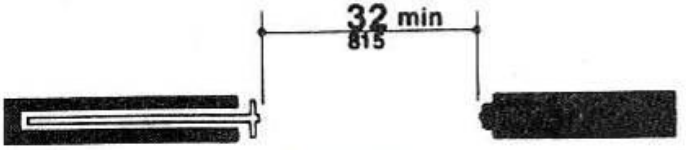


Figure 13: Clear Doorway Width and Depth Sliding Door

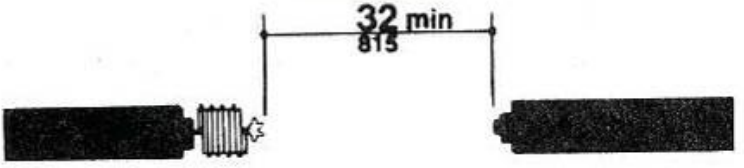


Figure 14: Clear Doorway Width and Depth Folding Door

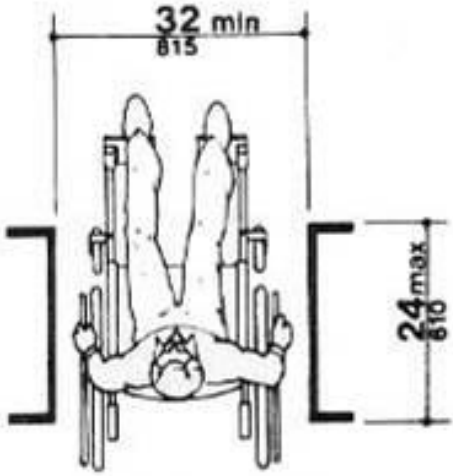


Figure 15: Clear Doorway Width and Depth, Maximum Doorway Depth

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

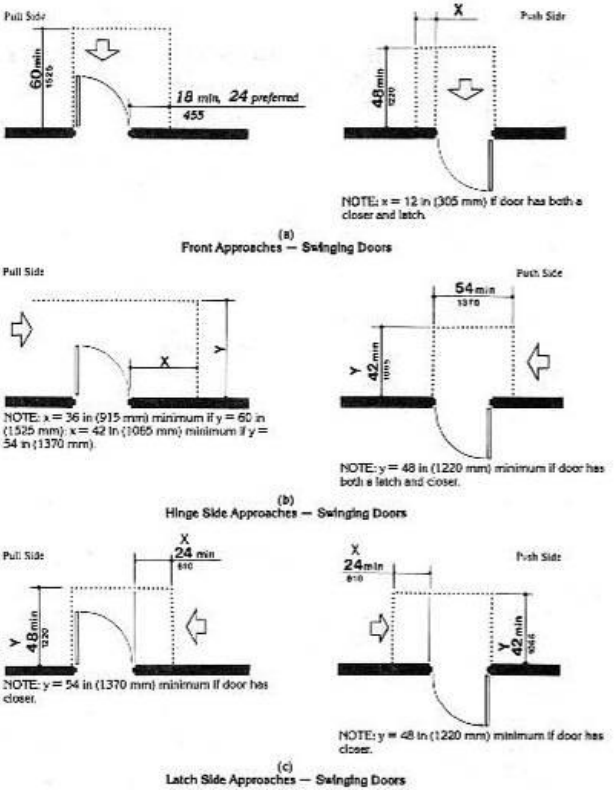


Figure 16: Manoeuvring Clearances at Doors

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

7.7 Water Closets: Water Closet shall have following standards:-

7.7.1 Clear Floor Space at Water Closets: Clear floor space for water closets not located in stalls shall 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.

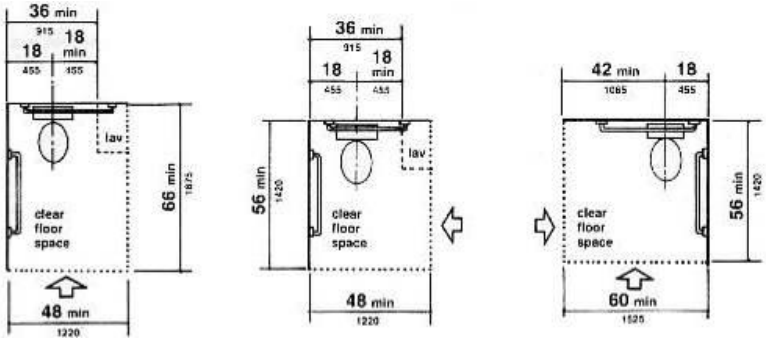


Figure 17: Clear Floor Space at Water Closets

7.7.2 Height: The height of water closets shall be 1.41 ft to 1.6 ft (430 mm to 485 mm), measured to the top of the toilet seat (see Figure 18: Grab Bars at Water Closets). Seats shall not be sprung to return to a lifted position.

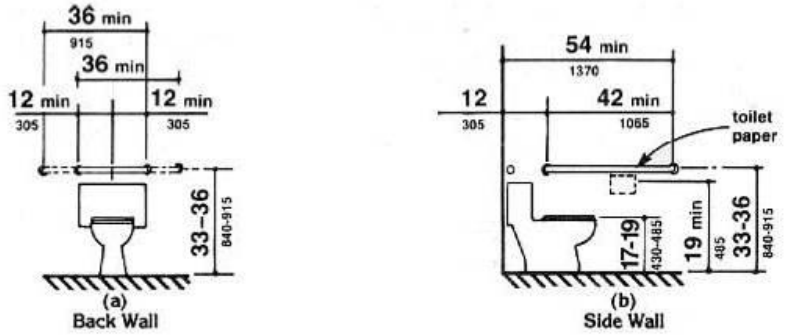


Figure 18: Grab Bars at Water Closets

7.7.3 Grab Bars: Grab bars for water closets not located in stalls shall comply with Figure 19: Grab Bars at Water Closets Side Wall below. The grab bar behind the water closet shall be 3 ft (915 mm) minimum.

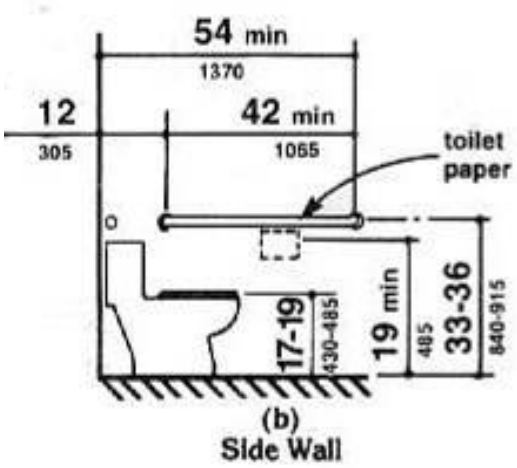


Figure 19: Grab Bars at Water Closets Side Wall

7.8 Toilet Stall:

7.8.1 Size and Arrangement: The size and arrangement of the standard toilet stall shall comply with Figure 29 below, Standard Stall. Standard toilet stalls with a minimum depth of 4.65 ft (1420 mm) shall have wall-mounted water closets. If the depth of a standard toilet stall is increased at least 3 inches (75 mm), 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.

7.8.2 Doors: Doors of Toilet stall, including its hardware. If toilet stall approach is from the latch side of the stall door, clearance between the door side of the stall and any obstruction may be reduced to a minimum of 42 inches (1065 mm).

7.8.3 Grab Bars: Grab bars complying with the length and positioning shown in following figures, shall 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.

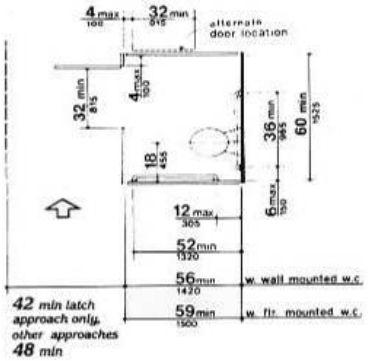


Figure 20: Toilets Stalls - Standard Stall

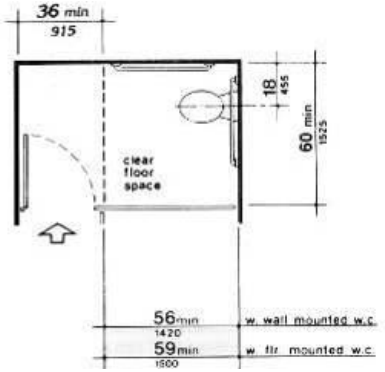


Figure 21: Toilets Stalls - Standard Stall (End of Row)

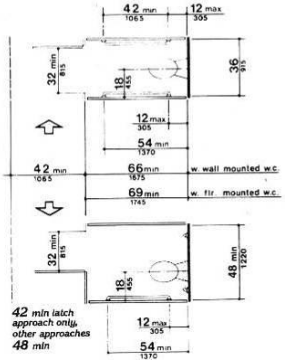


Figure 22: Toilet Stalls - Alternate Stalls

Chapter VIII Utilities Requirement for Commercial & Mixed Use Buildings

8.1 Central Air-Conditioning:

8.1.1 All buildings in DCK shall be required to have centrally air conditioning in such a way that external units are not visible on the elevations (external). Particularly, for buildings located in Central Business Sub-District (CBD), shall be required to have properly designed central A/C systems.

8.1.2 The Design & Drawings of Central A/C system, to be prepared by recognized Consulting firms, shall be required to be submitted for Approval.

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

8.2 Service Elevators:

8.2.1 Each building (above 400 Sq yds) shall have an independent Service Elevator besides the Passenger Elevators.

8.2.2 Minimum size of all service elevator cabin shall be 4 ft x 6 ft with 4 ft wide opening accompanied by two speed doors.

8.2.3 The number of Elevators shall be installed as per the latest International Building Code (IBC).

8.3 Utility Policy:

8.3.1 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.

8.3.2 Only generators shall be allowed in rear COS (where available & as per approval).

8.3.3 Cooling tower/Chiller Plants shall be allowed on roof top.

8.3.4 Central back-up Generator for the whole of commercial or high-rise building shall be provided & maintained by the owner & incorporated in the MEP plans.

8.3.5 Detailed Utility Design & Drawings for Electrical, Solar Energy, Gas, Telecom, Water, Sewer & Drainage shall be prepared & submitted by the Owner / Developer for approval (as per DCK utility policy updated from time to time).

8.3.6 Development charges for utilities shall be levied separately.

8.4 Maintenance Policy for Commercial / Mix Use & High-Rise Buildings:

8.4.1 Each commercial / mix use or high-rise building in DCK, shall be maintained by the Owner / Developer of the Building directly or through a proper Maintenance Company registered at DCK. A heavy penalty will be imposed if maintenance system of the building is not created by the owner / developer.

8.4.2 Monthly Maintenance Fees shall be charged to the occupants on pro-rata Sft basis by the Owner / Developer (this term shall be mandatory at time of sale of floor space as per Byelaws).

8.4.3 Maintenance shall 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.

8.4.4 Trash handling shall be done using trash/refuse chutes and receptacles. These shall be provided of a type approved by the DCK and shall confirm with the following clauses:

a. 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 be:

1) Be vertical for the whole length.

2) Have an internal diameter of not less than 24 inch.

b. Shall be provided 4 ft above the roof and shall be covered with a ventilating skylight and flushing spray and sprinkler head above top loading door.

c. Discharge into a suitable movable receptacle or receptacles of adequate size and pattern.

d. Be fitted with a self-closing hopper tight fitting plank or hopper, constructed of non-inflammable materials.

e. Be enclosed with walls of masonry of minimum two hours of fire resistance.

f. Refuse receptacles shall be housed in a chamber which shall:

1) Be provided with concrete curbs for the refuse receptacles to stand on.

2) Be adequately fly and vermin proof.

3) Be connected to and drained by a foul water drain.

4) Open to the external air.

5) Be lined throughout with glazed tiles.

8.4.5 Commercial, Mixed-Use and all Buildings shall be required to have facade cleaning done periodically. For buildings, where FAR is applicable facade cleaning system is mandatory and its design shall be included in submission plan.

8.5 Water Conservation (for all types of buildings):

8.5.1 Construction of grey water tank:-

Grey water tank shall be constructed by every plot holder having area of 500 Sqyds and above. Tank shall be connected with building through separate plumbing for grey water collection, appropriate grey water treatment shall be emplaced. Only health facilities are exempted due to anticipated high rate pathogen.

8.5.2 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.

8.5.3 No plot holders will be allowed to install ground water extraction facilities (including open well, bore hole etc.). In any justifiable requirement where it will be required, prior permission from DCK shall be obtained.

8.5.4 DCK will strictly monitor and audit the water utilization plan according to approvals given to any plot holder. Any anomalies found legitimate action will be taken against the individual.

Chapter IX Parking Requirements

9.1 Scope:

9.1.1 Parking requirements for vehicles in these Byelaws shall be applicable in following conditions:

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

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

9.2 General Conditions:

9.2.1 The parking space, including ramps, shall be exempted from FAR.

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

9.2.3 Minimum clear height of parking structure without obstruction shall not be less than 7'-6".

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

9.2.5 Parking can be provided on any floor i.e. basement, ground and upper floors, with ramp/car lifts as means of access. Car lifts (minimum two) shall be allowed as means of access for car parking. However, Parking through car lift shall be meant for shop owners/resident. Parking for visitors, customer of shops shall be through ramp.

9.2.6 Mechanical ventilation shall be provided for parking in the basement(s).

9.2.7 Multiple basements for parking can be permitted with sound engineering practices.

9.2.8 Sixteen percent of the total car parking space will be utilized to provide space for motorcycle and bicycle parking - six motorcycles and eight bicycles for every one car.

9.2.9 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 shall be taken.

9.2.10 Proper ramp should be provided for handicap persons.

9.2.11 Two parking spaces out of every 100 parking spaces shall be earmarked, duly labelled as such, for disabled persons at the most convenient location.

9.2.12 Dedicated parking for institution/ hospitals should be provided within the premises as per the required numbers based on the planned capacity. Major or associated roads shall not be utilized for car parking.

9.3 Application of Parking Requirements: Minimum one motor vehicle parking space shall be provided for:-

9.3.1 Every eight hundred square feet 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.

9.3.2 Every one thousand square feet of floor area for any commercial or mixed use building, residential or residential-cum-commercial building.

9.3.3 Every four thousand square feet of floor area for all educational institutions or minimum three fourth of motor vehicle parking space shall be provided per classroom whichever is more.

9.3.4 Minimum one motor vehicle parking space shall be provided for every 1500 Sft of floor area of hospitals.

9.3.5 Minimum one car lift out of two shall be provided with standby generator for every 40 cars, if parking level is at more than 40 ft. (12m) in height from road level.

9.3.6 Provide two way ramps for plots where FAR is applicable.

9.3.7 Standards for Parking Spaces: The following shall be standards for parking space:

Table 16: Standards for Parking Spaces

Description	Car	Motorcycles
Bay width	8 ft	2.5 ft
Bay length	16 ft	6.0 ft
Gradient of ramp	1:7.5	1:7.5
Straight turning radius (outer)	24 ft.	-
Helical ramp turning radius (outer)	32 ft	-
Lot turning radius	17.5 ft	-
Minimum ramp & driveway width: Two way traffic One way traffic	 18 ft 11 ft	-
Minimum space for parking one car	8 x 16 ft	-

Chapter X Drainage and Sanitation

10.1 Connection to Public Sewer: A sludge water shall be conveyed through septic tank to public sewer. Sewer connections shall not be granted without septic tanks.

10.2 Trenches for Drains and Private Sewers:

10.2.1 Where any drain or sewer is constructed adjacent to a load bearing part of a building, such precaution shall be taken to ensure that the trench should not impair the stability of the building.

10.2.2 Except where the nature of the ground makes it unnecessary, 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 shall be filled in with concrete to a level which 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 twelve inch.

10.2.3 In case, where the trench is within three feet of the foundation of the wall, the trench shall be filled in with concrete to the level of the underside of the foundation.

10.3 Sanitary Provisions: The minimum sanitary provisions as prescribed shall be followed as under:

10.3.1 Single rooms: For every five (5) single room units or servant quarters, there shall be one (1) wash basin, one (1) W.C. and one (1) bathroom shall be provided.

10.3.2 Boarding or Guest Houses: For every ten (10) bedrooms or less in a boarding house or guest house, there shall be at least two (2) W.C's, two (2) wash basins and two (2) showers.

10.3.3 Dormitory or Hostels: For every twenty (20) persons in a dormitory and hostel, there shall be at least three (3) W.C's, three (3) wash basins and three (3) showers, and for every ten (10) additional persons one (1) W.C., one (1) wash basin, and one (1) shower is to be added.

10.3.4 Office: In an office with twenty (20) persons (calculated at a rate of one person per one hundred square feet (100 Sft), there shall be minimum of two (2) W.Cs., two (2) wash basins and one (1) urinal. For every additional twenty persons (20) there shall be one (1) W.C., one (1)

wash basin and one (1) urinal. One (1) wash basin or equivalent washing space per twenty five (25) or less persons shall be provided for ablution purposes.

10.3.5 Shopping Center: A minimum of three (3) W.C.'s, one (1) urinal, and one (1) wash basin shall be provided for 3000 sq.ft total floor area. For every additional 2000 sq.ft floor area, one (1) W.C., one (1) wash basin and one (1) urinal shall be provided.

10.3.6 Public Assembly Building: Two (2) W.C's, one (1) wash basin, and three (3) urinals shall be provided for 1500 Sft total floor area and for every additional 1500 Sft total floor area one (1) W.C., one (1) wash basin and two (2) urinals shall be provided.

10.3.7 Masjid: Eight (8) ablution spaces for 100 Namazi's, two (2) W.Cs., one (1) shower room shall be provided. For every additional 100 Namazi's, the number of ablution spaces will be extended by 8, 6 and 4 respectively. In addition to this, special arrangement for female worshippers having a capacity of 100 Namazi's, three (3) ablutions and one (1) W.C shall be provided.

10.3.8 School: four (4) W.C.'s and two (2) wash basins per 100 students and for every additional fifty (50) students, one (1) W.C. and one (1) wash basin shall be provided.

10.3.9 Hospital: For every ten (10) beds in a general ward, there shall be at least one (1) water closet, one (1) washbasin, one (1) ablution tap and one (1) bathroom with shower. One (1) kitchen sink shall be provided in each ward.

10.3.10 Restaurants: For fifty (50) seats of restaurant, one (1) water closet, one (1) urinal, one (1) wash basin shall be provided.

10.3.11 All fixtures shall be divided proportionately amongst the genders.

10.3.12 Two (2) urinals may be replaced by W.C., while proportionately dividing the fixtures for ladies.

10.3.13 Handicapped Persons:

10.3.13.1 Provision of one (1) W.C. for special (disabled) persons shall be provided.

10.3.13.2 Shopping centers, Masjid, clubs, hotels, restaurants and schools must have adequate arrangements of toilets for handicapped persons.

Chapter XI Lighting and Ventilation

11.1 Size of External Openings:

11.1.1 Every room, other than rooms used for the storage of goods, shall be provided with natural light and natural ventilation by means of one or more openings in external walls. These openings shall have a combined area of not less than ten percent of floor area for habitable rooms and seven and half percent for other rooms, and the whole of such openings shall be capable of allowing free and uninterrupted passage of air.

11.1.2 Area for openings in case of warehouse, godown, storage places etc. shall not be less than five percent of the floor area unless the space is ventilated mechanically.

11.1.3 **Garages:** Every garage shall be provided with opening of not less than five percent of the floor area for ventilation and lighting.

11.1.4 **Staircase:** Seven and half percent of the staircase area shall be provided with opening for adequate lighting and ventilation.

11.2 Size of Internal Openings:

11.2.1 Unless the light and ventilation requirements are met by an air well or ventilation duct, all internal habitable rooms must have openings in internal air wells in addition to door openings not less than seven and half percent of the floor area of such room. Access for maintenance of shaft be provided, at the level, where the shaft commences.

11.3 Internal Air Wells:

11.3.1 Sizes of internal air wells for daylight and natural ventilation of habitable rooms shall be: -

- **a.** Building up to two storeys, 40 Sft with minimum width of well as 5 ft.
- **b.** Buildings up to five storeys, 80 Sft with minimum width of well as 8 ft.
- **c.** Each additional floor over five storeys, 80 Sft plus 10 Sft for each storey with minimum width of well as 10 ft.

11.3.2 Sizes of internal air wells for daylight and natural ventilation of kitchen, W.C and bathroom shall be:

- **a.** For building upto two storeys, 20 Sft with minimum width of well as 3 ft.
- **b.** For building with 3 to 5 storeys, 40 Sft with minimum width of well as 5 ft.
- **c.** For buildings higher than five storeys, 40 Sft plus 5 Sft for each additional floor with minimum width of well 5 ft.
- **d.** Access for maintenance of each such shaft shall be provided at lowest level of the shaft.
- **e.** The above 20 and 40 sqft natural ventilation well shall not be enforced in case mechanical ventilation is provided and substantiated with calculations.

11.4 Permanent Openings in Kitchen: Every kitchen shall have openings for permanent ventilation into the external air space not less than fifteen percent of its floor area.

11.5 Water Closet, Bath Room and Ablution Places:

11.5.1 Every appliance including water-closet, urinal stall, bathroom or ablution area shall be provided with natural lighting and ventilation with openings in external walls having a combined area of not less than two square feet per appliance except where adequate and permanent mechanical ventilation is provided which discharges into open space.

11.5.2 Water closet, bathroom and ablution place for handicapped persons please refer handicapped accessibility chapter.

11.6 Promote and Support Acoustic Comfort and Control: For all commercial and mixed use buildings where FAR is applicable alongwith 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.

11.7 Promote indoor air quality in air conditioned buildings with mechanical ventilation shall be as per prevalent ASHRAE requirements.

Chapter XII Building Design & Construction Requirements

12.1 Loads and Design: Structure analysis, design, detailing and loading shall be in accordance with the requirements of current Uniform Building Code hereinafter referred to as UBC and American Code or British relevant Code or any other Code. Structure shall however be designed by only one approved Code.

12.2 Seismic Design: Seismic Risk Zone for Karachi will be Zone-2B (with reference to UBC-97) which is equivalent to Peak Ground Acceleration (PGA) of 16% g to 24% g.

12.3 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. The soil report should correlate sub-soil type with UBC-97, or current sub-soil list.

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

12.5 Erection on Reclaimed Site: Erection on reclaimed site will be avoided. However:-

12.5.1 No building foundation shall be erected upon a site reclaimed by town sweepings or other refuse, except on recommendation of geo-technical and structural engineer.

12.5.2 No building plans shall be approved on open nallahs public sewers and the like.

12.6 Protection of Existing Services: During the making of an excavation in connection with a building works or services, adequate precautions shall be taken to secure the existing services.

12.7 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 shall satisfy the Board that the foundations of the building have been carried down to a level safe guarding its stability.

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

12.9 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, American Standard Testing method (ASTM), ACI or UBC and project specifications. Quality assurance program of architect or engineer may also be followed.

12.10 Supervision: Construction supervision and quality assurance will be responsibility of the Owner/Builder full time Engineers who will supervise the work and under the guidance of Consultant on full time or top supervision, supervising engineers, and inspectors, etc., as required in these Byelaws. Contractors, Builders or Developers will arrange full time supervisory staff shall carry out supervision and quality control for the category of buildings in these Byelaws.

Chapter XIII Sustainable Master Plan & Image Concept (SMPIC)

13.1 Sustainable Master Plan & Image Concept (SMPIC): DCK Authorities is first smart, sustainable and green city of Pakistan, also have aesthetic consisting different architectural styles.

13.2 Similar Façade Elements: In order to have an aesthetic consistency, different architectural styles are adopted for different sectors under similar façade policy as provided herein.

13.2.1 Similar Façade Elements

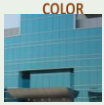
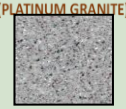
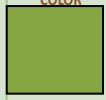
13.2.1.1 All buildings are to be developed based on the façade policy of each sector and Architects should ensure that the Design elements as provided herein are part of the façade.

13.2.2 Architectural Styles of Buildings: Architectural styles of building are planned keeping in view old and modern concept.

13.2.2.1 Modern Styles: Modern styles have following major features:-

a. Major Features

(1) Straight, Square or Rectangle openings
(2) Flat Roofs
(3) Smooth surfaces with minimal variety of materials
(4) Straight lines with no decoration in elevation

STYLE	THEME ELEMENTS				
	GRANITE	GLASS (DOUBLE GLAZED)	ALUMINIUM CLADDING	ALUMINIUM WINDOW FRAME	PAINT
MODERN WHITE	GRANITE (PERLA BIANCA) 	BLUE COLOR 	ASH WHITE CLADDING 	SILVER COLOR 	ASH WHITE COLOR 
MODERN GREY	GRANITE (PLATINUM GRANITE) 	DARK BLUE 	GREY COLOR 	DARK GREY COLOR 	BEIGE COLOR 
MODERN BEIGE	GRANITE (VERDE VENEZIANO) 	GREEN 	BEIGE COLOR 	BEIGE COLOR 	BEIGE COLOR 

13.2.2.2 Spanish Styles: Spanish styles have following major features:-

a. Major features

(1) Tapered Tiled Roof (Terrace tiles)
(2) Round Arch Windows (openings)
(3) Iron over the Framework exterior
(4) Fluted and decorated classical
(5) Columns
(6) Wall finish with textured plaster
(7) Classical column with Flute and sculptural decorations

13.2.2.3 Ottoman Styles: Ottoman styles have following major features:-

a. Major Features

(1) Pointed/ Round arches
(2) Tapered and curved building Profile
(3) Bands of alternate color stones and bricks
(4) Distinct pencil shaped minarets style
(5) Ornate tile / stone decoration
(6) Spires on roof tops of building
(7) Wide roof with over hangs supporting brackets

13.2.2.4 Post Modern: Post Modern style have following major features:-

a. Major Features

(1) Variety in Forms, Textures and Opening
(2) Combination of Contrasting
(3) Diverse Roof Profile
(4) Variety in façade elements

13.3 Sustainable Façade Elements: Based on the Sustainable Master Plan and Image Concept (SMPIC) of DCK, buildings are required to have sustainable façade which includes the following:

13.3.1 Windows: Windows should have the following:-

13.3.1.1 All windows used in all buildings at DCK shall be required to have Aluminium or UPVC (white) double glazed windows and ventilators (including curtain wall).

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

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

13.3.1.4 In case of curtain wall, all mullion joiners should be of aluminium. All aluminium sections should be inclusive of built-in architrave / beading (commonly known as collar windows).

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

13.3.2.1 All Glass to be used shall be double glazed with colour to match the scheme of the particular sector (similar facade element) conforming 60% reflective, high performance glass for heat.

13.3.2.2 All double glazed window spacers should be of aluminium/UPVC.

13.3.2.3 It is mandatory to use tempered glass in commercial, mix use and special purpose buildings (where FAR is applicable), to avoid accidents.

13.3.2.4 In case the total glazed elements in an external wall which let in light is upto forty percent (40%) of the external wall area, then the glazing elements must meet the following performance criteria of Thermal Transmittance (summer U value) => U = 2.1 W/m2K (Max.) and Shading Coefficient (SC) = 0.2 (Min) and Light Transmittance = 0.2 (Min.).

13.3.2.5 In case the total glazed elements in an external wall which let in light is within a range of forty percent (40 %) to sixty percent (60%) of the external wall area, then the glazing elements must meet the following performance criteria of Thermal Transmittance (summer U value) => U = 1.9 W/m2K (Max) and Shading Coefficient (SC) = 0.32 (Min) and Light Transmittance = 0.1 (Min) or as approved by DCK Authorities.

13.3.3 External Walls Cladding (Ground Floor): In commercial buildings, on Ground Floor (where applicable), maintenance free lighter colour granite stone/ colour crete shall be provided on front and rear elevations and all three sides in case of corner plot.

13.3.4 External Wall Cladding (Upper Floors): External wall cladding on upper floors should have following:-

13.3.4.1 On upper floors of all commercial buildings, robust & maintenance free aluminum cladding (similar façade element)/reflective paint / colour crete is required to be used.

13.3.4.2 Aluminum cladding used shall be fire resistant.

13.3.4.3 Any other sustainable and maintenance free material may also be allowed with special permission by DCK Authorities provided that the approved colour scheme of that area alongwith its overall ambience is not affected.

13.3.5 External Walls (Insulated): All external walls shall be provided with Insulation on hollow blocks, light weight insulation blocks or

blocks with insulation etc on south and west facades of all commercial buildings for energy conservation with emphasis on following:-

13.3.5.1 Minimum Envelope Performance Requirements: For all new commercial buildings, exterior building elements must have average thermal transmittance (also known as U Value) and Shading Coefficients (SC) that does not exceed the values specified and Light Transmittance greater than or equal to the values specified.

13.3.5.2 External Walls and Floors:

a. Building elements forming the external walls and floors (where one side of the floor is exposed to ambient conditions) must have an average thermal transmittance (U Value) which does not exceed U = 0.57 W/m^2K.

b. Where the floor is in contact with the ground, the insulation should be applied upto one meter (1m) below from the top most point in contact and shall be all around perimeter of the building.

13.3.6 Plumbing & Other Services: To ensure that the buildings will look aesthetically pleasing, no pipes are to be visible on front and back elevations. Independent pipe chases, ducts or shafts shall be required to be provided.

13.3.7 Side Walls: In case plot on which the construction is proposed has an empty plot/s adjacent to it, the plot owner shall ensure to provide side walls to be plastered with grooves and to provide paint (similar colour of cladding or paint) and to keep it maintained.

13.3.8 Corner Plots: All sides of a corner plot are to be treated as front elevation i.e. no visible plumbing, no external air conditioning units to be placed on any elevation. All external air conditioning units to be placed on roof, balcony or in ducts via pipe chases.

13.3.9 External Air Condition Units: No external AC units to be placed on any elevation of the commercial buildings and all external units to be placed on roof balcony in duct via pipe chase.

13.3.10 Signboards:

13.3.10.1 To control defacing of buildings in DCK , all signboards on all commercial buildings are to be in-line with the DCK Signboard Policy. Signboards sizes and shapes are to be first submitted to TP&BC

Directorate on A3 paper (in triplicate) showing the signboards shapes & sizes shown in colour prior to installation. After installation, a photograph on A4 size is to be submitted also for the record of TP&BC. Signboards for shops in commercial buildings will be of size having length covering entire length of the shop or, part thereof, width of 3 ft and 1 ft raised from the wall. For display of the name of the Commercial building, Group etc size will be 10 ft x 4 ft x 1 ft.

13.3.10.2 However, DCK Authorities may allow variant size of the sign board based on aesthetics corresponding the size of the building, building front, shape of the building. Signboards may be allowed more than one depending upon size, shape and view from different sides of the building.

13.3.11 Glazing: Ratio of glazing on front & back elevations are to be minimum thirty percent (30%) for structure to look visually de-massed with following requirements:-

13.3.11.1 Glazed Elements – Fenestration Requirements:

a. In case the total area of external walls that let in light is upto thirty percent (30%) of the external wall area, then the glazing elements must meet the following performance criteria:
   (1) Thermal Transmittance (Summer U Value)
   U = 2.1 W/m^{2}K (max.)
   (2) Shading Coefficient (SC) - 0.4 (max.)
   (3) Light Transmittance - 27%

b. In case the total area of external walls that let in light is between thirty percent (30%) and seventy percent (70%) of the external wall area, then the glazing elements must meet the following performance criteria:
   (1) Thermal Transmittance (Summer U Value)
   U = 1.9 W/m^{2}K (max.)
   (2) Shading Coefficient (SC) - 0.32 (max.)
   (3) Light Transmittance - 20%

Note: The owners are required to submit with completion plan certification from glass supplier/manufacturer that the glass used in the said building is fulfilling the requirements numerated above.

13.3.12 Balcony Parapets: All Balcony parapets are either to be of block masonry with aluminium cladding on it or in case railing is used, it is to be of stainless steel or any other maintenance free non corrosion material.

13.3.13 Green and Insulated Roofs: Building roofs should have following:-

13.3.13.1 All roofs shall be provided with water proofing membranes along with insulation / Insulated tiles or green roof to ensure minimum envelope performance requirements to ensure an average Thermal Transmittance (U Value) which does not exceed a U Value = 0.3 W/m^2K.

13.3.13.2 Also, where Green roofs are provided, they should be provided with proper root barrier and drainage and irrigation systems. The owner shall be required to provide documentary proof of the same to DCK Authorities.

13.3.14 Solar Water Heaters (SWH): Building should have:-

13.3.14.1 For all commercial buildings, use of Solar Water Heaters (SWH) with automatic Electric backup system and/or Electrical Heater is mandatory. All SWH works to be done by specialist vendors.

13.3.14.2 All Pipe materials to be used for SWH, plastic materials shall preferably be used, which are resistant to UV radiation and to the temperatures upto 95°C. All hot water pipes connected to SWH are preferably to be insulated to reduce heat losses from hot water mains.

13.3.14.3 Integration of backup system is also mandatory (electrical or gas, however, electrical is mostly recommended backup system as only electrical rod is required with no extra piping will be required).

13.3.14.4 At the time of submission of plans, the owner is required to submit backup systems which he is planning to use, for the approval of TPBC, DHA. Also, at the time of completion of plans, the owner is required to submit pictures of the roof showing the installed SWH on the commercial building.

13.3.15 Water Saving Devices: It is mandatory to use water saving faucets, showers fittings, and flushing devices (water conservation) in all new commercial buildings.

13.3.15.1 Water Efficient Fittings (for all commercial buildings): Water efficient system and fitting shall be used.

a. Water-conserving fixtures must be installed, meeting the following criteria.

(1)	Showerheads	8 Liters per minutes
(2)	Hand wash basins	6 Liters per minutes
(3)	Kitchen sinks	7 Liters per minutes
(4)	Dual flush toilets	6 Liters full flush, 3 Liters part flush
(5)	Urinal	1 Liter per flush or waterless

13.3.15.2 Dual Flush toilets must be used.

13.3.15.3 Automatic (proximity detection) / push button faucets must be installed in all public facilities.

13.3.15.4 Cisterns serving single or multiple urinals in commercial buildings must be fitted with manual or automatic flush controls that are responsive to usage patterns. Only sanitary flushing is acceptable during building closure or shutdown.

13.4 Sustainability:

13.4.1 Mixed Use Buildings only:

13.4.1.1 To promote and support the use of low emitting, at least 5% of the total vehicle parking spaces reserved for low-emitting, fuel-efficient vehicles.

13.4.1.2 To promote and support the use of bicycles, they should be provided within the building or within a shaded area located no more than 30 meters from a building entrance within the plot limit.

13.4.1.3 Minimum one motor vehicle parking space shall be provided for every 1500 Sft of floor area for hospitals.

13.4.1.4 Where car lifts are provided there shall be a minimum of two car lifts with facilities of standby generator where-ever so required**.**

13.4.2 Energy: Energy conservation have to be kept in all designs.

13.4.2.1 To promote sustainable design:

a. Provide adequate natural daylight to reduce reliance on electrical lighting and to improve conditions for the occupants.
b. Residential and public buildings must provide direct line of sight (views) to the outdoor environment

13.4.2.2 To ensure high quality indoor spaces:

a. All ventilation system outdoor air intakes must be located at suitable distance from potential sources of contamination to reduce the possibility of odor or air contaminants entering the ventilation.
b. Exhausted air must be discharged in a manner to avoid it being drawn back into the building.
c. Indoor air quality testing must be carried out prior to occupancy.
d. Air Quality testing must be carried out by an air testing company or laboratory accredited by the Administration.
e. Testing equipment must have initial and periodical calibration certificate from an external calibration facility accredited by the Administration.
f. Air Quality Test report must be provided with completion plan of all commercial buildings.

Table 17: Maximum Limit for Air Containment

Sampling Schedule	Type of Samples	Maximum Acceptable	Sampling Duration
Pre-Occupancy	Formaldehyde	< 0.08 parts per million (ppm)	8-hour continuous monitoring (8 hour time-Weighted average[TWA])
	Total Volatile Organic Compound (TVOC)	< 300 micrograms/m^3	
	Suspended Particulates (<10 microns)	< 150 micrograms/m^3	

13.4.2.3 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.

13.4.2.4 HVAC maintenance standards: The cleanness of HVAC systems must be maintained and all parts must be inspected and cleaned by licensed specialized maintenance companies by DCK Authorities.

13.4.2.5 Air quality in parking spaces: Mechanical ventilation must be provided to ensure that the Carbon Monoxide (CO) concentration in the enclosed parking area is maintained below fifty (50) parts per million (ppm) by:

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

b. Installing a variable volume ventilation system controlled in response to input from a minimum of one CO sensor per four hundred square meters (400 m^2) floor area of parking.

13.4.2.6 To establish energy efficiency in the building sector, all buildings should acquire an energy certificate indicating energy class and consumption.

13.4.2.7 To enhance building envelope performance:

a. Building elements forming the external walls, roofs, and floors (where one side of the floor is exposed to ambient conditions) must have an average thermal transmittance (U Value) which does not exceed specific values.
b. Double glazed units for windows and roof lights must meet specific performance criteria.

13.4.2.8 To minimize Thermal Bridges:

a. Thermal Bridges must be eliminated or insulated to reduce the amount of heat transfer. For this reason the use of External Thermal Insulation Composite Systems shall preferably be installed.
b. Other than houses, all regularly used air conditioned entrance lobbies must be protected by a door design which acts as a barrier to the loss of conditioned air.

13.4.2.9 To Eliminate Urban Heat Island Effect and promote thermal and occupant comfort:

a. All opaque external roofing surfaces must comply with a minimum Roof Solar Reflective Index (SRI) value for a minimum of 75% of the roof area.
b. Normal occupied spaces should have an average air velocity between (0.2 – 0.3) m/s.
c. HVAC system must be capable of providing a range of conditions as follows for 95% of the year.

13.4.2.10 To optimize lighting features, for optimum and efficient lighting ceilings should be able to reflect light back into the space. The reflective ability of a ceiling is indicated by its Light Reflectance or LR value.High light reflectance or Hi-LR ceilings should be used with an LR of 0.83 or higher.

13.4.2.11 To promote energy efficient lighting features:

a. All light fixtures intended for the general illumination of interior or exterior spaces must be fitted with Fluorescent Lamps or Light Emitting Diodes (LED).

b. High frequency electronic ballasts must be used with fluorescent lights and metal halide of 150 W and less. High frequency electronic ballasts must be labeled as conforming to an international standard approved by the local Administration.

13.4.2.12 To increase energy efficiency of lighting system:

a. The average Lighting Power Density for the interior connected lighting load for specific building types must be no more than the watts per m² of gross floor area given in the Table.

Table 18: Maximum Average W/m² Requirements across total building area

Building Type	Maximum average W/m² across total building area
Commercial/Public: Offices, Hotels, Resorts, Restaurants	10
Educational Facilities	12
Manufacturing Facility	13
Retail Outlets, Shopping Malls , Workshop	14
Warehouses	8

b. Lighting Power Densities for building types not listed in the above Table should be no greater than those values given in ASHRAE 90.1-2010 or equivalent as approved by the Administration.

13.4.2.13 To increase energy efficiency of lighting in outdoor spaces:

a. The average Lighting Power Density for the exterior connected lighting load for specific building types must be no more than the watts per m² of gross floor area given in the Table.

Table 19: Maximum Average W/m² Requirements across total building area

Building Area	Maximum W/m² or linear meter
Uncovered parking lots and drives	1.6 W/m²
Walkways less than 3 meters wide	3.3 W/linear metre
Walkways 3 meters wide or greater	2.2 W/m²
Outdoor Stairways	10.8 W/m²
Main entries	98 W/linear meter of door width
Other doors	66 W/linear meter of door width
Open sales areas (including vehicle sales lots)	5.4 W/m²
Building Facades	2.2 W/m² for each illuminated wall or surface or 16.4 W/linear meter for each illuminated wall or surface length
Entrances and gatehouse inspection stations at guarded facilities	13.5 W/m²
Drive-up windows at fast food restaurants	400 W per drive-through

b. Lighting Power Densities for building types not listed in the above Table should be no greater than those values given in ASHRAE 90.1-2010 or equivalent as approved by local Administration.

13.4.2.14 Increase energy efficiency through lighting control:

a. Occupant Lighting Controls must 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.

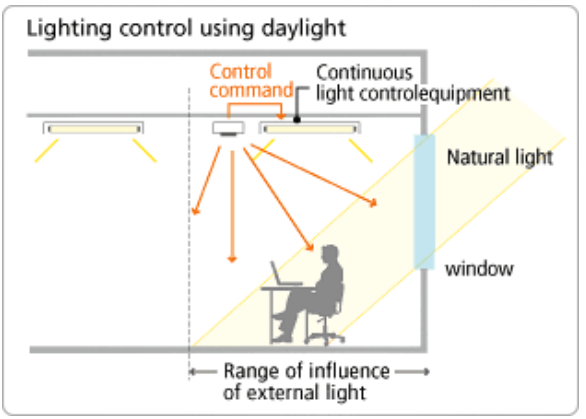


Figure 23: Lighting Control using daylight

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

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

d. To Increase energy efficiency through lighting control:

(1) The artificial lighting in spaces within 6 meters in depth from exterior windows must be fitted with lighting controls incorporating photocell sensors capable of adjusting the level of electric lighting to supplement natural daylight only when required.

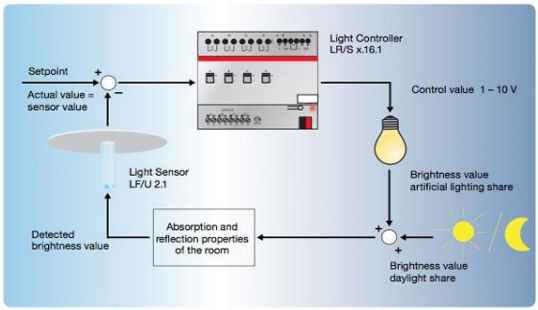


Figure 24: Energy Efficiency through Light Control

(2) The combined artificial and daylight must provide an illumination level at the working plane between 400 and 500 lux. When there is 100% daylight, the lux levels may exceed 500lux.

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

a. 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.

b. All separate control zones must be capable of:

(1) Independent temperature control;

(2) Inactivation when the building, or part of building served by the system, is not occupied.

c. The operation of central plant only when the zone systems require it.

13.4.2.16 To minimize heat loss and prevent condensation:

a. Pipes and ducts passing through conditioned spaces must be insulated in accordance with BSI British Standard BS 5422:2009 or other insulation standards approved by the Administration.

b. Insulation materials used must meet the requirements of Byelaws, 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.

13.4.2.17 To minimize heat loss and prevent condensation, Pipes passing through outside or unconditioned spaces must be insulated with the minimum insulation thickness:

Steel pipe nominal pipe size (mm)	Temperature of contents (°C)					
	10° C		5° C		0° C	
	Minimum Insulation Thickness (mm)					
	λ = 0.018 W/mK	λ = 0.038 W/mK	λ = 0.018 W/mK	λ = 0.038 W/mK	λ = 0.018 W/mK	λ = 0.038 W/mK
15	50	30	45	30	45	30
20	60	30	55	30	45	30
25	60	40	55	35	55	30
32	65	40	55	35	55	30
40	65	40	60	35	55	30
50	70	45	60	40	60	30
65	70	45	60	40	60	40
80	75	45	65	40	60	40
100	75	45	65	40	70	40
150	90	50	80	45	75	40
200	90	55	80	45	75	45
250	100	55	80	55	75	45
300+	100	80	100	75	80	70

13.4.2.18 To provide accurate records of electricity consumption:

a. Additional electrical sub-metering must be installed in all buildings with a cooling load of at least 1MW or gross

floor area of 5,000 m² or greater. All major energy consuming systems with a load of 100kW or greater, must be sub-metered.

b. Each individual tenancy shall have a sub-meter installed.

c. Meters used must be specifically designed for the measurement of chilled water rather than for hot water.

d. All meters must be capable of remote data access, have data logging capability and be used for demand management and cost allocation purposes.

13.4.2.19 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 and the manufacturer.

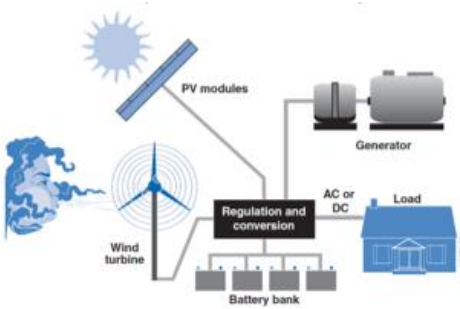


Figure 25: Byelaw and Conversion

13.4.2.20 Operation of Solar Water Heating System: For all new houses and sports facilities, a solar water heating system must be installed to provide 75% of domestic hot water requirements. Solar water heating installations must 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 shall be controlled so as to obtain maximum benefit from the solar heater before operating.

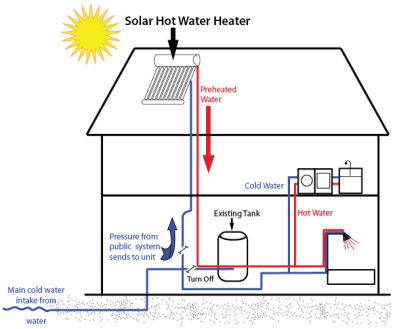


Figure 26: Solar Water Heating System

13.4.2.21 Energy efficient elevators and escalators

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

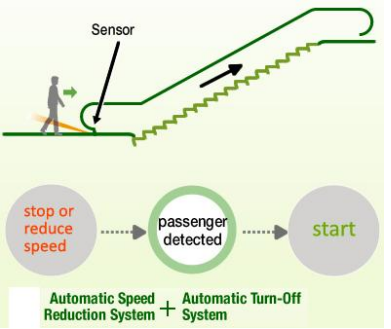


Figure 27: Energy efficient elevators and escalators

b. 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.

13.4.2.22 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.

13.4.2.23 Ductwork leakage testing: Must be carried out by a company approved by local Administration to conduct commissioning of buildings.

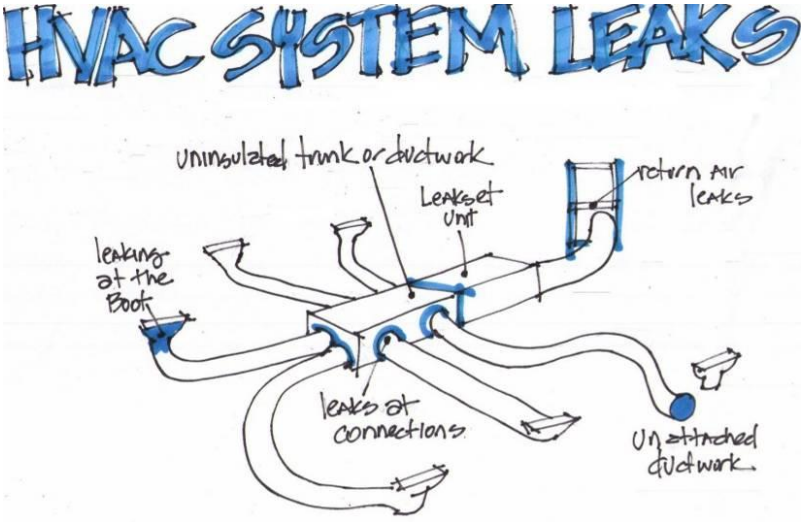


Figure 28: HVAC system leaks

13.4.2.24 Set HVAC maintenance standards

- **a.** HVAC systems must be accessible for regular inspection, maintenance and cleaning of the equipment.
- **b.** A maintenance manual and schedule should be developed by 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 as approved by local Administration.

c. Service records including details of both preventative and corrective maintenance must be kept onsite and be readily available for inspection by local Administration.

13.4.2.25 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 by local Administration.

a. Commissioning of buildings must be carried out by a licensed company of DCK Authorities.

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

Table 20: Chartered Institution of Building Services Engineers (CIBSE) Codes

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'

13.4.2.26 Ensure the proper operation of Building Services in existing buildings with a cooling load of 2MW or greater. The re-commissioning of ventilation, water systems central plant, lighting and control systems must be carried out at least once every 5 years.

13.4.2.27 Provide full central control of all the building's technical systems

a. For all new buildings with a cooling load of 1 MW or gross floor area of 5,000 m² or greater, the building must have a central control and monitoring system capable of ensuring that the building's technical systems operate as designed and as required during all operating conditions, and that the system provides full control and monitoring of system operations, as well as diagnostic reporting.

b. At a minimum, the system must control the chiller plant, HVAC equipment, record energy and water consumption and monitor and record the performance of these items.

Figure 29: Building Energy Management System

c. Water

(1) To promote water conservation:

(a) Water-saving fixtures should comply with minimum flow rates given.

(b) Dual Flush toilets, Automatic (proximity detection) / push button faucets in public spaces and Cisterns with manual or automatic flush controls should be installed.

(c) Faucets installed as a component of a specialized application may be exempt from the flow rates upon application to Administration.

Table 21: 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

(2) To promote water recycling, For all new buildings with cooling loads equal to or greater than 400kW, 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 come into contact with the human body.

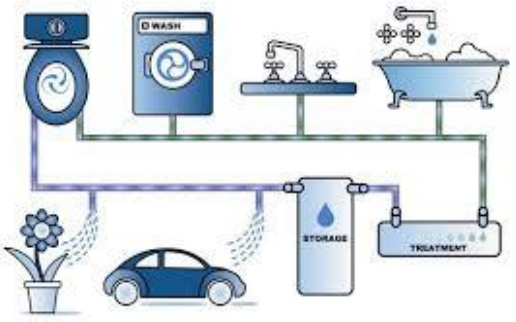


Figure 30: Water Recycling System

(3) To promote water efficiency in irrigation:

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

(b) All irrigation systems must incorporate, at any point that they connect to a portable water supply, backflow prevention devices which must be checked 12 months. Testing must be in line with the manufacturer's recommended practice for field testing or any other testing regime approved by local Administration.

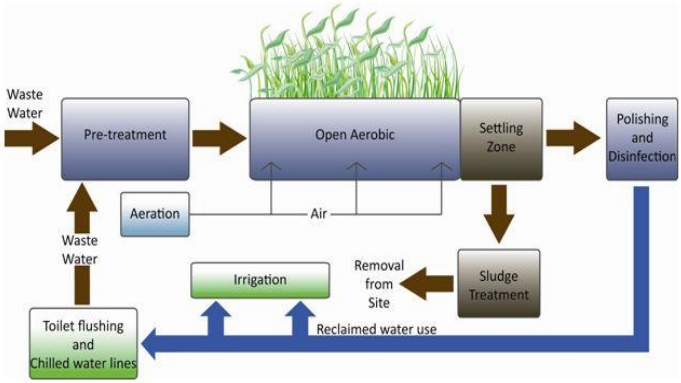


Figure 31: Water Efficiency in Irrigation

(4) To achieve water conservation and savings through water metering:

(a) For all buildings with a cooling load of at least 1 MW or gross floor area of 5,000m² or greater, additional water metering must be installed.

(b) The building operator shall be responsible for water metering.

(c) All meters must be capable of remote data access and must have data logging capability and complying with international and local specifications.

(d) Water metering should be integrated into BMS where it exists.

(e) Sub-meters should be used for demand management and cost allocation purposes.

(5) To promote Grey water reuse:

a. 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.'

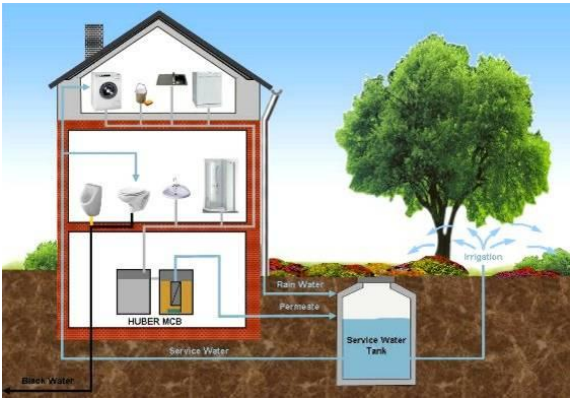


Figure 32: Grey Water Collection & Recycle Process

b. There must be a minimum air break of 25mm between any potable water sources and grey water collection systems.

c. Grey water must not be used for purposes where it will come into contact with the human body. It must be treated to the standard required by local Administration.

(6) To Promote health and safety, All Water Features with a water storage volume of over 1,000ltrs 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 Legionella bacteria or germs contamination and not exceed the maximum limits outlined in the technical guidelines issued by the Administration.

d. Waste:

(1) To promote recycling:

(a) Domestic kitchens must have a minimum storage facility of two 10 litres waste receptacles clearly labeled for 'recyclable' and 'non-recyclable'.

(b) All new apartment, office, educational and recreational buildings must have a garbage room with a minimum area of 7.5 m^2 (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 the building in accordance with the following Table.

Table 22: Minimum Requirement for Storage of Recyclables

Built Up Area (BUA)	Minimum Space for Storage of Recyclables
Less than 500 m^2	7.5m^2
50 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

(c) 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 m^2 (107.63 sq.ft) and be reachable but not restrict access to the building.

e. Materials:

(1) To promote occupants' health and safety through thermal and acoustical insulation materials:

(a) Insulation manufactured without the use of Chlorofluorocarbons (CFC's), non-toxic and not release toxic fumes during combustion, have a Threshold Limit Value (TLV) of 0.1 or less of Individual VOCs and be fire resistant in accordance with the local requirements.

(b) They should achieve all the requirements of the approved specifications by local Byelaws.

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

(2) To improve indoor air quality and protect occupants' health:

(a) All paints and coatings used should not exceed locally allowed limits of Volatile Organic Compound (VOC).

(b) Paints, coatings, adhesive bonding primers, adhesive primers, sealants and sealant primers must be accredited/ certified from specialized labs or any source approved by the Administration.

(3) To eliminate the use of hazardous materials:

(a) Asbestos containing materials must not be used in the construction and maintenance of buildings.

(b) Lead or Heavy Metals Containing Materials must be accredited /certified according to international/local standards by any source approved by the local administration.

(4) To protect natural resources, reduce waste, strengthen local community and economy:

(a) Recycled content must account for at least 5% of the total volume of materials used in the construction of the building.

Figure 33: Product Lifecycle

(b) Building materials sourced regionally must constitute at least five 5% of the total volume of materials used.

(5) To protect the ozone layer, The installations HVAC equipment must contain refrigerants with zero ozone depletion potential (ODP) or with global warming potential (GWP) less than 100, with the exception of equipment containing less than 0.23 kilograms (kg) of refrigerant.

f. Open Spaces:

(1) To protect the local ecosystem, a minimum of 25% of the total planted area of a building plot, including vegetated roofs, must utilize plant and tree species indigenous or adapted to the local climate and region.

(2) To minimize exterior lighting pollution:

- **(a)** All exterior light fixtures must be shielded so that all of the light is projected below the horizontal plane passing through the lowest part of the fixture.
- **(b)** Wall washing lights must spill no more than 10% of the lighting past the building façade.
- **(c)** Downward directed lighting must be used for lighting of signage.
- **(d)** All exterior lighting must be fitted with automatic controls to ensure that lights do not operate during daylight hours.

(3) To Optimize construction of paved areas, 50% of the hardscape of the development must:

- **(a)** Demonstrate a Solar Reflective Index (SRI) of at least twenty nine (29), or
- **(b)** Use an open grid pavement system, or
- **(c)** Be shaded by vegetation or
- **(d)** A combination of the above.

(4) To Promote solar control in outdoor spaces, In all buildings -other than houses- all pedestrian linkages within the plot area must be shaded using materials with a SRI equal to or greater than those specified in the table.

Table 23: Minimum Roof SRI Requirements

Type of Roof	Minimum Roof SRI
Steep Sloped Roofs (slopes steeper than 1:6)	≥ 29
Flat and Low Sloped Roofs	≥ 78

Chapter XIV Submission of Building / Completion Plans for Sanction

14.1 Notice for Erection/Re-erection of Building:

14.1.1 Every person intending to erect, re-erect or make additions or alterations to a building shall apply to DCK and shall pay immediately on demand, fee for the scrutiny of Building Plans as prescribed by DCK, from time to time and shall at the same time submit five copies, duly signed by himself/herself and his/her Architect and a soft copy on CD as per checklist. Every person intending to erect, re-erect or demolish, or carry out additions or alterations in a building shall engage an architect and structural engineer as applicable, for all types of buildings.

14.1.2 A registered professional as specified in these Byelaws, shall give notice of his having undertaken the preparation of plans and supervision of building works, in Form 2 & 3. When the person so engaged ceases to be incharge of such building works before the same is completed, further such work shall forthwith be suspended until a fresh appointment is made and a certificate in Form 5, duly signed by the previous professional, shall be obtained by the owner and submitted to the DCK to the effect that the professional has ceased to be incharge of the work and that the work carried out under his supervision was to his entire satisfaction.

14.2 Oversight in Scrutiny of Drawings: Any over sight 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 Byelaws.

14.3 Site Plan: The site plan shall indicate the following:-

14.3.1 The direction of North.

14.3.2 The boundaries of the site on which it is proposed to erect or alter the buildings.

14.3.3 Location of gate(s).

14.3.4 The names, if any, and width of all streets on which the site abuts, together with numbers of adjoining houses or premises.

14.4 Building Plan: Building plan to a scale not less than eight feet to an inch and the scale used shall be indicated on plan which shall include sections, elevations and shall inter alia indicate:

14.4.1 The external dimension of the main building.

14.4.2 The basement, ground floor, upper floor, if any, and the roof.

14.4.3 The position and dimension of all projections beyond the walls of the building.

14.4.4 The position of underground water tank, overhead water tank and fire fighting tank.

14.4.5 The position of septic tank and grey water tank.

14.4.6 Levels of Compulsory Open Space (COS) for rain/storm water drainage.

14.4.7 The clear dimensions of all rooms and position of doors, windows and ventilators in each room at every storey.

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

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

14.4.10 Roof plan showing the location, dimension and levels of overhead water tank, lift machine room and 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.

14.4.11 Contour plan, if the difference in level of plot varies more than 5 ft.

14.4.12 Every building plan submitted shall bear the signature of the licensed architect signifying its having been prepared under his supervision as per DCK Byelaws.

14.4.13 Elevation and cross section of boundary wall, gate, ramp and water channel with respect to adjoining road/street.

14.4.14 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.

14.4.15 Building corners on roadside are chamfered properly as prescribed in Byelaws.

14.4.16 All fresh/new proposed building plans shall be prepared with standard colour i.e. black. However, for proposed revised building plan,

deviations and addition/alteration, distinct colours and key (legend) to the colour, shall be given thereon as under: -

a.	Proposed work	-	Red
b.	Existing work	-	Black
c.	Demolition	-	Yellow

14.4.17 All Building plans consisting of Architectural and Service drawings prepared and signed by a Registered architect and a Registered engineer of DCK, if engaged as envisaged shall be submitted (five copies computer print and one soft copy on CD/USB).

14.4.18 All drawing for plot measuring up to 500 sq yds shall be submitted on a sheet of 20 X 30 inches and on sheet 30 X 40 inches for plot over 500 sq yds.

14.4.19 All title documents relating to the plot showing his right to carry out such works, shall be accompanied with application (one set) as per checklist.

14.4.20 Any other information or document required by the DCK.

14.5 Structural Drawings:

14.5.1 Soil test report will be got prepared by the owner or by registered structural engineer on behalf of the owner, from registered geo tech consultant.

14.5.2 Detailed structural drawings and calculations, on the basis of soil investigation report, are required for residential, commercial and all other projects.

14.5.3 Structural drawings will be submitted by the owner after approval of the building plan. DCK Authorities shall confirm receipt of structural design for residential building having Basement, Ground and First Floor and accord approval of construction of the building. For Multi-storeyed buildings having Basement, Ground Floors and Upper Floors, on receipt of structural design, DCK Authorities shall arrange vetting of the design from Proof Engineer, and shall accord approval for construction after vetting of the structural design. Demarcation will be issued after receipt or approval of the same.

14.5.4 These drawings showing layout and x - sectional details of foundations, columns, lintels, beams, slabs, underground and overhead

water tanks, stairs, lift shafts, construction/expansion joints etc at each level, shall be provided.

14.5.5 Buildings having configuration basement, ground and first floor, one set of structural drawings on A3 sheet along with soft copy duly signed by the DCK's registered structural engineer will be provided by the owner for DCK record purpose. Registered structural engineer will render a certificate that the structure is safe catering seismic design on Form 4 as required under these Byelaws.

14.5.6 Multi storey buildings having configuration more than one storey i.e. basement, ground and upper floors, 2 x sets of structural drawings on A3 sheet alongwith soft copy duly signed by the DCK Authorities's registered structural engineer will be provided by the owner. Registered structural engineer will render a certificate that the structure is safe catering seismic design on Form 4 as required under these Byelaws. DCK will analyse/vetting of the structural drawings from registered proof engineer. Registered proof engineer will render a certificate that the structure has been vetted and is safe catering seismic design on Form 4 as required under these Byelaws. Demarcation will be issued after approval of the structural drawings.

14.5.7 For multi-storey buildings, the owner will ensure execution of the project is according to code of construction practice as well as monitored by registered structural engineer preferably the one who designed the project. After approval of the structural drawings, registered structural engineer will analyse and point out any observation, will get its clarification and seek guidance from the proof engineer, thereby ensuring the soundness of design. Registered structural engineer will supervise and ensure that all the works on site is being executed as per approved design and specifications and will keep the owner update for all proceedings. In case of any discrepancy with respect to design as well as execution, the owner shall seek advice/guidance from DCK authorities, which will be rendered keeping on board the proof engineer, structural engineer and the owner. The owner will be responsible for any failure at the later stage.

14.6 Period of Approval: After the receipt of an application for permission to carry out building works, DCK shall vet the plans as per category (fee charges). If the building plans are not according to the

Byelaws then it will be sent back to owner/architect for resubmission. Construction shall commence within one year and completed within three years from the date of approval by DCK. Construction period may be extended upto one year after the approval of DCK Authorities.

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

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

14.9 Compliance of Conditions of Approval: Every person who carries out building works or demolition works shall comply with the directions and conditions accompanying the sanction and the relevant Byelaws of DCK.

14.10 Submission of Deviation Plans: During the currency of the work, if the owner desires to make deviations from approved building plan then he should submit deviation plan duly marked with the changes to DCK authorities. Any work thereto shall proceed after approval of the deviation plan. Subsequently completion plan will be submitted for approval of DCK authorities according to approved deviation plan. Deviations warranting changes in structural design will not be processed through Deviation plan and Revised building plan will be mandatory in this case.

Where a person has erected or re-erected a building which is not in conformity with the sanctioned building plans such person shall, together with the report of completion of the building, submit a completion plan showing the building exactly completed and the deviation made in the building from the sanctioned building plan on Form 8 for consideration of the DCK.

14.11 Availability of Forms and Checklists: The Forms prescribed in these Byelaws shall be obtainable from the office of DCK Authorities on payment of prescribed charges. DCK can make changes to the format of the Forms for public convenience.

14.12 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, DCK shall:

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

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

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

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

14.12.2.3 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 DCK authorities.

14.13 Demarcation Certificate: Owner should apply for demarcation of his plot after obtaining building plan duly approved by DCK. DCK staff will give the physical demarcation at site which will be verified at site after physical erection of boundary pillars by the owner.

14.14 Notice of Verification of Building Lines: Every person who commences any building work under these Byelaws shall give notice through the licensed architect in Form 6 to the DCK 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 6 and shall not proceed further until verification certificate is obtained from DCK.

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

14.15.1 Prior to excavation for foundation of basement (if applicable)

14.15.2 After excavation and before laying of lean of basement foundation

14.15.3 Foundation slab of basement level and before any further activity (if applicable)

14.15.4 At plinth level

14.15.5 At bottom level of main gate(s)

14.15.6 At ground floor slab level

14.15.7 At the time of digging of underground water tank.

14.15.8 At mezzanine floor slab level if approved in building plan

14.15.9 At first floor slab level

14.15.10 At second and every subsequent floor slab level if approved in building plan

14.15.11 At the time of pouring of stair tower

14.15.12 Construction of septic tank

14.15.13 Construction of grey water tank and it's allied connection arrangements (if applicable)

14.15.14 Completion of Electric Works especially earthing (as per approved load)

14.15.15 Completion of lightening conductors arrangements (where applicable for high rise building)

14.15.16 Completion of Plumbing Works for Gas, Water and Sewerage.

14.15.17 For commercial buildings, the owner will arrange inspection at the time of water/air pressure test) for plumbing works for Gas, Water and Sewerage.

14.15.18 Completion of Elevation Works
14.15.19 Completion of Handicapped Accessibility
14.15.20 Completion / Testing of Fire fighting / Fire Alarm Systems
14.15.21 Completion / Testing of Elevator Works

14.16 Failure to obtain NOC: In case of failure to obtain NOC, owner shall be liable to pay the penalty as per prevailing rates prescribed by the DCK Authorities.

14.17 Completion Plan: Every person who carries out and completes building works under these Byelaws shall within 30 days of the completion of the entire work deliver to the DCK at its office in writing on the prescribed Form No. 7 & 8 as the case may be of such completion together with a certificate or certificates on the prescribed Form duly signed by the licensed architect, etc., engaged under these Byelaws together with the certificates as mentioned in Byelaws and documents as per checklist.

14.17.1 No person shall occupy any such building or use any part affected by the erection or re-erection of such building until thirty days' notice of completion is given to the DCK and the permission under these Byelaws has been granted by the DCK.

14.17.2 After the receipt of the notice of completion DCK shall arrange to inspect such work and after such inspection either approved or disapproved or regularized deviations as per Byelaws.

14.18 Addition, Alteration and Renovation to Buildings after Approval of Completion Plan:

14.18.1 Permission for addition, alteration, placing of generator set on roof top and lift will be accorded by DCK Authorities duly marked on approved completion plan alongwith other documents as per checklist. Permission for addition and alteration will be granted upto forty percent (40%) of approved covered area within allowable limits in completion plan for each floor.

14.18.2 Permission for repair, renovation and boring will be accorded after submission of application by the owner alongwith documents as per checklist.

14.18.3 Failing to get approval of addition, alteration, repair and renovation on approved completion plan or Undertaking such works without prior approval DCK, DCK reserve the rights to impose penalties as applicable.

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

14.20 Demolition of Un-Approved Construction: Construction executed on any plot in DCK, without approval of DCK shall be demolished at the risk and cost of the owner. If the member fails to regularize (within three months) under the prevalent policy of DCK.

Chapter XV Administrative Aspects

15.1 Commercial Activity: Commercial / semi commercial activity cannot be allowed in the residential area.

15.2 Clubs /Guest Houses: Residential area cannot be used / rented as Clubs, Guest House, Guest Room or Hostel etc

15.3 Utilization of Vacant Plots: Vacant plots/open area cannot be used for any function/gatherings except funeral gathering.

15.4 Fire Works / Discharge of Arms: Display of fireworks (Aatish Bazi) and discharge / testing of arms (Hawai firing) are strictly prohibited in DCK Authorities.

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

15.6 Grave Yard: Burial in DCK grave yards will only be carried out after formal approval and procedures from DCK Authorities.

15.7 Hiring of House/Shop/Apartment: Any tenant hiring of house/shop/apartment will get NOC from DCK Authorities prior to occupation.

15.8 Security Check Post/Tower: Security Check Post/tower within plot line upto maximum 5' x 5' will be allowed after approval from competent Authority. No check post will be allowed outside property line.

15.9 Vehicles Stickers: All the members residing in DCK are bound to get their vehicle's sticker from DCK Authorities.

15.10 Rash / Un-safe Driving: All the residents are requested to drive within allowable limits in DCK Authorities. Driver caught over speeding / un-safe driving will be liable to traffic laws. Underage driving

strictly prohibited. Similarly, driving a motorbike without safety helmet is not allowed within DCK AUTHORITIES premises.

15.11 Servant Passes: Member should get passes for all servants from DCK after proper registration.

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

Chapter XVI Safety and Security Measures during Construction

16.1 Site Hoardings: No member shall start construction of building work on a site abutting on a street without having first arranged hoarding or barriers to the satisfaction of the DCK along the peripheral length of such site so as to prevent danger/injury/mishap to the public or the persons employed at the site. However that these Byelaws do not apply in the case of building works in connection with structures situated at least 15 ft away from a public street and being not more than 25 ft in height.

16.2 Neighbours Safety: If entire 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 ft is to be left while excavating the basement(s). Any damage occurring due to excavation shall be made good by the owner of under constructed property who started excavation for basement. Work may be stopped by DCK Authorities if the owner fails to take remedial action.

16.3 Use of Public Streets: No part of any street shall be used in connection with the construction, repair or demolition of any building except with the written permission of the DCK Authorities. Any person holding such permission shall put up and maintain to the satisfaction of the DCK Authorities, fences of barriers in order to separate the building work from such street. Where such separation is not possible member shall make arrangement for the security of public to the satisfaction of DCK Authorities.

16.4 Caution Light's for Obstructions: Any person causing any building material or other things to be deposited, any excavation to be made or any hoarding to be erected shall 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 shall be provided during day time.

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

16.6 Removal of Obstruction after Completion of Works: All obstructions shall 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.

16.7 Dangerous Obstruction: If any material, hoarding, excavation or any other thing near or on any street shall be in the opinion of the DCK Authorities dangerous to the passers-by along such street, the DCK Authorities shall cause the same to be removed, protected or enclosed so as to prevent danger there from and shall 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.

16.8 Stability of Adjacent Building: No excavation, dewatering, earthwork or demolition of a building which is likely to affect the failure of adjacent building shall 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.

16.9 Filling of Excavated Site: A site once excavated shall not be kept open and idle for a period beyond the validity period of building plan failing which DCK shall not revalidate the plan and in case of any mishaps the owner shall be responsible for life and property of the effectees. Excavated site shall be filled in by DCK Authorities at the risk and cost of owner, if found appropriate.

16.10 Adequate Safety Measures:

16.10.1 Adequate safety measures shall where necessary be provided and used to protect any person from falling on earth, rock or other material of or adjacent to any excavation or earth work.

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

16.10.3 No load shall 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.

16.10.4 Where vehicles or machineries are used close to any excavation there shall be measures to prevent the vehicles or machineries from over-running and falling into the excavation or causing collapse of any side of the excavation.

16.10.5 In all buildings of greater than twenty feet height temporary rails, scaffolding or barriers shall be installed during construction at the edge of slabs and around all openings such as lift or stairwell, etc.

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

16.12 Safe Loading: No roof, floor or other part of the building shall be loaded at the demolition and construction with debris or materials as to render it unsafe.

16.13 Scaffolds:

16.13.1 Suitable and sufficient scaffolds shall 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 shall be provided to every place at which any person has to work at any time.

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

16.13.3 All vertical members of scaffolds on ground level facing roadside should be adequately wrapped with spongy material upto a height of at least seven feet. Any horizontal member if used, upto a height of seven feet from ground, should be wrapped all along its length with such material.

16.14 Roadside Protection:

16.14.1 To ensure adequate safety of the pedestrian and other road users, all buildings having a height of more than ground + two floors should have adequate arrangement by way of providing protective covering of suitable material.

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

16.15 Working Platform:

16.15.1 Every working platform, which is more than seven feet height from which a person is liable to fall, shall be at least two feet wide provided the platform is used as a working platform only and not for the deposit of any material.

16.15.2 A clear passage-way at least one and half foot wide shall be left between one side of any working platform and any fixed obstruction or deposited materials.

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

16.17 Ladders:

16.17.1 Every ladder shall be of good construction, sound material and adequate strength for the purpose for which it is used.

16.17.2 Every ladder shall be securely fixed when in use and shall not have any missing or defective rungs.

16.18 Work on Slopping Roofs:

16.18.1 Where work is to be done on the slopping surface of a roof, suitable precautions shall be taken to prevent persons employed from falling off.

16.18.2 Suitable and sufficient ladders or wooden planks, securely supported, shall be provided and used to avoid concentration of loads.

16.18.3 Where persons are 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 shall be taken to prevent tools or materials falling from such roofs so as to endanger such persons or passers-by.

16.19 Precautions for Raising and Lowering Loads: For raising or lowering loads or for suspending those by hand or power operation, every precaution shall be observed to ensure safety of human and materials on the construction site.

Chapter XVII Fire Safety Precautions

17.1 Emergency Fire Exits:

17.1.1 Emergency fire exits of non-combustible material shall be provided in all commercial and public use buildings.

17.1.2 Complete Civil Defence drawings for Fire Safety Precautions shall be required to be submitted for approval of DCK prior to construction.

17.2 Portable Fire Extinguishing in Commercial and Public Buildings: These shall be provided:-

17.2.1 Two extinguishers in stage area, in each dressing room and one immediately outside each entry in theatres;

17.2.2 One extinguisher in each 2000 square feet of area of public assembly buildings, but not less than one on each occupied floor, and not less than one in each lab, workshop or vocational room;

17.2.3 At least one extinguisher on each floor at stairway landing and in corridor at each lift or group of lifts in mixed use and commercial buildings.

17.3 Fire Escapes/ Emergency Staircase:

17.3.1 Every Building in DCK 400 square yards and above shall have at least two emergency staircases.

17.3.2 Emergency Staircase shall be designed with Fire Rated Doors (1 ½ hours rated), Fire resistance rated floor or commonly known as fire door within 2 hours rated walls and shall be naturally ventilated. It will exit towards open space on ground floor.

17.3.3 At Least one emergency staircase will be located within 100 ft of any point on a floor for building larger than 600 Sq yds.

17.3.4 All elevators / lifts should be equipped with functions for emergencies like power failure, fire and earthquake.

17.3.5 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 is opened to facilitate the safe evacuation of passengers.

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

17.3.7 Door Safety sensors, emergency light, emergency call button / phone, all required safety features for the stability of the elevator system, safety brakes.

17.3.8 All elevators should be in Handicapped Accessibility compliant as per the following ADA requirements as a minimum:

17.3.8.1 Elevator hall and car buttons should be mounted at 42 inches height with call buttons minimum 0.75 inches in diameter, with illumination levels for buttons.

17.3.8.2 Braille plates next to buttons and at entrance jambs.

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

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

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

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

17.3.8.7 Emergency control that is grouped at the bottom of the elevator control panel and have their center lines not less than 36 inch above the finish floor.

17.3.8.8 Handrails to be provided at a height of 30-inches.

17.4 Stand Pipe Equipment (Hose Reel):

17.4.1 For the purpose of prevention and fire extinguishments, every multi-storeyed building shall be equipped with stand pipes as under:

17.4.1.1 From four to eight storeys in height shall be equipped with not less than 2.5 inch dia pipes;

17.4.1.2 Over eight storeys in height shall be equipped with not less than 4 inch dia stand pipes.

17.4.2 The number of standpipes shall be such that all parts of every floor area are at a maximum distance of one hundred and twenty feet from the stand point.

17.4.3 Insofar as practicable, standpipes shall be located with outlets within stairway enclosures, but if these are not available, the standpipes shall be located in a common corridors. In any case one shall be located in the main.

17.4.4 The construction of standpipes be of galvanized iron/gun metal.

17.4.5 Stand pipe risers shall extend from the lowest to the top most storey of the building or part of building which they serve.

17.4.6 When more than one stand pipe is required, they shall be interconnected at their bases by pipes equal in size to that of the largest riser.

17.4.7 Every standpipe or stand-system in case of interconnected stand-pipes, shall be equipped with a fire department approved in-let connection of corrosion resistant metal (e.g. gunmetal) located on an outer building face nearest to street approximately twenty to thirty feet above finished ground and suitably marked "fire department connection-standpipe."

17.4.8 Standpipes shall be provided in every storey with a one and half inch dia flexible hose not less than one hundred feet long, with a half inch nozzle, being in an approved rack or cabinet.

17.4.9 The standpipe shall be fed by an overhead water tank reserved solely for this purpose. The minimum capacity of this tank shall not be less than five thousand gallons, with a minimum of seven feet head above the highest discharge point.

17.5 Dry Riser:

17.5.1 For each commercial and mixed use building, 18 meter tall, a dry riser (supply system intended to distribute water to multiple levels or compartments of a building, as a component of its fire fighting systems) shall 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 compartmentation of the building.

17.5.2 Dry risers are a building Byelaws requirement in occupied buildings over 18 metre tall. The designers or architects may opt for the superior protection of wet risers. Wet risers are a building Byelaws requirement in buildings over 50 metre. Dry risers may also be found in

environments where access is limited or compartmentation is an issue i.e. multilevel basements, car-parks or hospital corridors etc.

17.5.3 Dry riser shall consist of 3 components to meet BS 5041 BS 5306, BS 9990 or other National Fire Protection association (NFPA) equivalent.

17.6 External Inlets:

17.6.1 Inlets enable connection of fire service water supplies shall be required to be provided with an external cabinet or enclosure marked "DRY RISER INLET". Within this enclosure, a collecting head with at least 2 BS Instantaneous male couplings shall 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 shall also be provided. These enclosures should be secure from vandalism but should be designed for immediately accessible with a breakable area in the door to facilitate urgent fire service connection.

17.7 Pipe work:

17.7.1 All required pipe work shall be provided to make it functional by ensuring that the pipe is 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.

17.7.2 In buildings over 18 meters provide single outlets on each floor (100 mm or 4 inch internal diameter pipe work fitted). For taller buildings and for situations where multiple outlets on floors are required, 150 mm or 6 inch 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 within fire resisting enclosures or shafts.

17.7.3 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.

17.8 Outlet Points:

17.8.1 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.

17.9 Automatic Sprinkler System: Automatic sprinkler system shall be provided in:-

17.9.1 Every public use / institutional building which serves restrained or handicapped persons.

17.9.2 Covered car parking areas in building of which upper storeys are designed for other uses when such parking area exceeds five thousand square feet.

17.9.3 Out garages or terminals for passengers serving more than four buses at a time.

17.9.4 All building compartments used for cottage manufacturing display or sale of combustible materials and products which are more than 7500 square feet in covered area.

17.9.5 All areas of theatres except auditorium, music hall and lobbies.

17.9.6 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 square feet in area.

17.9.7 Sprinkler provision shall be made in the immediate vicinity of generators or any electrical equipment.

17.9.8 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.

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

17.10.1 Every sprinkler system shall be equipped with a fire department approved inlet connection located on an outer building face nearest to street approximately twenty to thirty feet above finished ground and suitably marked "Fire department connection-Automatic sprinklers".

17.10.2 Automatic sprinkler system from the incoming supply along with automatic fire booster pump set, shall be connected to a building's RCC water storage tanks. This tank shall 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 NFPA. There shall be minimum pressure (3 bars or 20 PSI) above the highest discharge point according to NFPA.

17.10.3 Automatic sprinkler system shall set off automatic alarm system simultaneously.

17.10.4 Every sprinkler system shall be provided with a readily accessible outlet valve to control all sources of water supply.

CHAPTER XVIII Violations of Byelaws

18.1 Removal or Prevention of Violation:

18.1.1 DCK shall take other appropriate measures to ensure compliance with these Byelaws. For compliance of the Byelaws, DCK shall carry out inspections of any Residential as well as Commercial premises. Inspections shall be arranged on periodic, on occasional, on any observation, or on any complaint from the neighbourhood, basis. Owner/Occupant of the property shall arrange the inspection of the premises by DCK detailed inspection team. Inspection of premises may be asked through writing (notice), verbal or Telephonic correspondence. However, owner shall verify the identification of DCK inspection team before entry to the premises. Representative of the owner/occupant shall accompany the DCK Inspection Team during the inspection.

18.1.2 If DCK finds that any of the provisions of these Byelaws, or any rules relating thereto, or any conditions of a general or special permit, are being or have been violated, it shall serve a notice in writing to any person responsible for the violation.

18.1.3 The notice shall indicate the nature of the violation and DCK may order such action as it may deem appropriate to correct the violation including but not limited to:

18.1.3.1 Discontinuance of any illegal work being done on, or activities being conducted in relation to, building;

18.1.3.2 Requiring the owner or builder who are carrying out or have carried out such building works, on or before such day as shall be specified in such notice, by a statement in writing subscribed by him or by an agent duly authorized by him and addressed to DCK, to show sufficient cause why such building works or such part thereof shall not be removed or altered to comply with these Byelaws;

18.1.3.3 If such person fails to show sufficient cause to the satisfaction of DCK why such building works or part thereof shall not be removed or altered. DCK may take following actions:

a. Require the person who has carried out the works against the provisions of these Byelaws to alter or

cessation of the whole or part of construction works thereof;

b. Any other measures authorized by these Byelaws, or with the conditions of permit.

18.1.4 The order shall specify the period within which the violation shall be corrected and in the event of non-compliance with the order, DCK may take appropriate measures under the relevant Byelaw or Act to be taken to effect compliance. The expenses shall be recoverable from the owner in the manner provided for the recovery of arrears of revenues or taxes.

18.1.5 The giving of notice and making and serving of an order under this clause shall not be a prerequisite to the initiation of, and shall not bar, any prosecution under any applicable law, and DCK may take action under this clause whether or not a prosecution has been initiated.

18.2 Enforcement by DCK: Administrator/Secretary DCK may direct the concerned officer (under whose jurisdiction violations have occurred) to take action under these Byelaws with respect to any violation including entering upon and sealing of premises.

18.3 Appeals:

18.3.1 Within thirty days from the date of receipt of any order of DCK under these Byelaws or of its determination on an appeal under the preceding sub-Byelaws, 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.

18.3.2 Administrator, may arrange hearing of the person by himself or depute an officer for the purpose. The deputed officer or officers shall report, may be written or verbal, alongwith recommendations to Administrator.

18.3.3 DCK after considering a report and any recommendations of the hearing officer, may affirm, modify or amend the order or determination.

18.4 Finality of Orders or Determination: Unless an appeal has been admitted as provided by Byelaws an original or appellate order, or determination of the Administrator shall be final.

CHAPTER XIX Planning Guidelines

19.1 Planning Guidelines:

19.1.1 Gated Community: DCK is a Gated Community that would provide more secure environment inside

19.1.2 Environment Control: It is the earnest endeavour of DCK to provide congenial environment with economy of resources. The residents on their part shall be required to conceive their building with proper designs incorporating all comforts and safety precautions.

19.1.2.1 Shading Devices. People are encouraged to employ shading devices for trees plantation and insulation on exposed surfaces of habitable rooms that face direct sun, to balance temperature within. These shall be incorporated in proposals and shown on submission drawings.

19.1.2.2 Landscaping. Outdoor spaces shall be properly landscaped to reduce glare and reflective heat energy.

19.1.2.3 Natural Ventilation. Natural lighting and ventilation in all habitable rooms / area shall be ensured by providing windows to outside or to internal ventilating ducts as prescribed in these Byelaws.

19.1.2.4 Air-Conditioning. All air-conditioning units shall meet minimum energy standards (Energy Efficiency Ratio) EER ≥2.9.

19.1.3 Power Efficiency: Every member shall follow the power policy set forth by DCK.

19.1.3.1 Power Supply. In order to supplement power generation, owners of commercial plots and of residential plots having area of more than 500 sq.yds shall be required to install solar power systems in their buildings. The system shall produce min. 30% of their peak demand. This power shall be used to energise external lights, water and sewerage pumps. Any excess power, if generated shall be purchased by the city Authority for re-distribution.

19.1.3.2 Wind, Gas and solar energy shall be used as alternative energy sources

19.1.4 Water Efficiency: The city will have dual water supply system i.e. potable water and non-potable water.

19.1.4.1 Internal water supply system shall be designed to cater for both accordingly i.e. separate lines and separate water tank shall be kept.

19.1.4.2 Non-potable water shall be used for flushing & gardening.

19.1.5 Septic Tank: Every building / plot shall have a septic tank constructed as per approved design with a retention capacity for at least seven days before disposal.

19.1.6 Sewerage System: Every member shall install two pipe systems for conveyance of sewage and sludge separately. Sludge shall be conveyed directly to city mains whereas sewage shall be collected in septic tank for decomposing and use for gardening or disposal to city mains.

19.1.7 Solid Waste Management: Every building / household shall be required to keep dry, wet and metal trash in separate bags that should be distinguished by their colour.

19.1.8 Solar Water Heater: Solar Water Heaters (SWH) with automatic electric backup system or electric/gas heater is mandatory.

19.1.9 Designs of Utility Services: Design of building shall include services designs viz., mechanical, electrical and plumbing (MEP) designs.

19.1.10 Building Materials: There has been tremendous development and changes in construction industry within recent past. We may make use of the same to our advantage to improve sustainability and maintain quality. There are methods to be adopted for aesthetic & functionality.

19.1.11 Wind Catcher: It may be allowed as per design of building and required by the owner.

19.1.12 Roof Gardens: Construction of roof Garden will be encouraged in DCK provided appropriate arrangements for seepage water retention have been made.

Chapter XX Dangerous Buildings

20.1 General: For the purposes of this chapter all such buildings or structures which are declared as dangerous by the following evaluation committee shall fall in two categories: -

a.	President	-	Director TP&BC
b.	Members	-	Additional Director TP&BC Additional Director (Development/Services) Additional Director Legal Additional Director (Security & Vigilance) Nominated Senior Architect(s) registered with PCATP & DCK Nominated Senior Structure Engineer(s) registered with PEC & DCK

20.1.1 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, shall classify as "Dangerous Building Category-1", and shall be liable to be demolished.

20.1.2 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 a to a level, where it could by way of strengthening, appraisal and restoration be brought partially or wholly near to its original status, shall be classified as "Dangerous Building Category-2".

20.2 Notices for Dangerous Buildings:

20.2.1 If in the opinion of any member of the evaluation committee, a building or part thereof has become dangerous for human habitation, the evaluation committee shall give at least twenty-four hours 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.

20.2.2 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.

20.2.3 If the evaluation committee finds such building dangerous, ruinous or unsafe after proper inspection and investigation by technical representative, the DCK shall serve to the owner of such building or structure, a written notice stating the defects thereof, and shall 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 shall be commenced or completed within the period specified by the evaluation committee.

20.3 Buildings Unfit for Human Habitation and Notice of Prohibition:

20.3.1 If for any reason it shall 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 shall 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 no objection is raised by such owner or occupier 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 shall 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 DCK in leading Urdu and English daily newspapers.

20.3.2 A thirty days notice of such prohibition shall 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 shall 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 twenty-four hours notice may be issued by the evaluation committee.

20.3.3 When a building or part of a building has been vacated under clause 20.2.2 the owner shall 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 shall remain displayed until the required repairs, demolition, or removal are completed.

20.4 Alteration, Modification or Repairs of Dangerous Buildings:

20.4.1 At any time after a building or part of a building has been vacated under clause 20.2.2, 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 shall 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 Non compliance and safety of habitants is compromised, DCK may order complete vacation of Building and then proceed with demolition at risk and cost of the owner.

20.4.2 If the evaluation committee considers it impracticable to render such building or part thereof fit for human habitation, the DCK, may by notice in writing call upon the owner to demolish it in a period specified by the evaluation committee.

20.5 Demolition of Dangerous Building on Expiration of Notice Period: If at the expiration of the period specified in the notice and order to demolish a building or part of a building issued under clause 20.4.2 has not been complied with, the DCK may direct, by an order in writing, the demolition thereof through an approved contractor who has on his roll at least one professional responsible for undertaking all necessary safety measures during the process of demolition as per procedure laid down by the evaluation committee.

20.6 Extension of Period for Repairable Buildings: For sufficient causes, the evaluation committee may extend the time allowed under, or prescribed by clause 20.4.1.

20.7 Evacuation of Dangerous Buildings:

20.7.1 If in the opinion of the DCK, any building, wall, or structure or anything affixed thereto is in a hazardous or dangerous state, DCK 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 DCK considers necessary for the public safety, and if the danger appears to be imminent, the DCK 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.

20.7.2 Any expenses incurred by the DCK shall be paid by the owner concerned.

20.7.3 When the owner of any building, wall, structure or anything affixed thereto fails to execute the repairs required from him by the DCK, the tenant or occupant of such building, wall, structure or anything affixed thereto may, with the previous approval of the DCK, carry out such repairs.

20.7.4 Except with the permission in writing from DCK no person shall enter into or remain in any building from which the tenant or occupant has been removed.

Chapter XXI Public Sale Projects

21.1 No Objection Certificate: The owner/builder of commercial/mixed-use/multi-storeyed buildings, to be constructed, for onward sale/rent is required to obtain NOC from DCK authorities in accordance with these Byelaws. 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 shall be completed before issuance of demarcation letter.

However, DCK may give time to complete the formalities before NOC at plinth level.

21.2 Application for NOC: A builder applying for NOC to DCK shall furnish the requisite documents and particulars in Prescribed Form 10 as appended to these Byelaws, duly signed by all concerned as mentioned therein.

21.3 Undertaking of the Builder with their Professionals: The builder and his/her architect and engineer shall submit the undertaking on the Prescribed Form. The undertaking of the builder, architect and engineer shall be on a stamp paper in accordance with format specified in Form.

21.4 Determination of Price and Cost Estimates: A builder shall 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 shall be quoted in all the advertisement and promotion literature published by the builder. No escalation in the cost shall 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 shall be the percentage of price increase. In this case the builder shall inform the DCK along with relevant inflation figure in writing along with supporting documents and get the approval of DCK authorities. No escalation shall be granted to the builder who has failed to complete the project in time.

21.5 Processing Fee for Obtaining NOC: A builder shall pay to DCK authorities a processing fee 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 shall include name of project, address, builder, office address, architect and engineers, number of floors, number and sizes of shops, flats, offices, compulsory open spaces, date of completion, and draft sale/rent agreement, etc) within seven days of issuance of "NOC for Sale."

21.6 Security Deposit:

21.6.1 The builder shall deposit cash security equivalent to one percent of the cost of construction of the project with the DCK to be held in a account which shall 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 byelaw 21.18, deduction from the security shall be made in proportion to the extent of the delay.

21.6.2 Security deposit amount shall be refunded on the expiry of one year maintenance period and shall be accordingly enunciated in the NOC granted by the DCK. Maintenance period of the building shall 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.

21.6.3 DCK shall 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 DCK 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 :-

21.6.3.1 To construct the building in accordance with the design specifications agreed with the purchaser and approved by DCK.

21.6.3.2 To complete the building on time as per agreement with the purchaser.

21.6.3.3 To provide services as per agreement with purchaser.

21.6.3.4 To obtain Occupancy Certificate from DCK.

21.6.3.5 If builder is found to be involved in any unlawful activities in the project.

21.6.3.6 To rectify defects after occupation provided the builder is at fault.

21.6.4 Any such defect or violation shall have to be made good by the builder at his own cost and risk and the cash security deposit, shall not absolve the builder of his responsibility to the project as per condition of NOC.

21.6.5 This security deposit shall not, in any way prejudice the DCK's rights under these Byelaws to initiate any other proceedings or action in the event or violation of any of these Byelaws.

21.7 Application Form for Allotment: After the receipt of NOC from the DCK the builder shall get filled in an application form from a person intending to book a unit in the project.

21.8 Execution of Sub-Lease: A unit shall be offered for sale on cash or cash-cum-loan basis as per schedule of payment. Sub-lease shall be executed as per sale and allotment conditions, in favour of allottee, before delivering the possession of the unit. The allottee shall own the building structure of his unit and shall proportionately share the price or rent of land of the unit with other allottees of the project.

21.9 Confirmation of Allotment: The builder through an allotment letter to the allottees shall confirm the allocation of the unit, within fifteen days of booking. The allotment letter shall 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 DCK at the time of NOC.

21.10 Agreement with Allottee: Within fifteen days of the issuance of allotment letter and before calling other installments in respect of the unit, the builder shall execute an agreement with the allottees.

21.11 Payment of Installment

21.11.1 The payment of installment shall be made by the allotee strictly according to the schedule of payment. In case of failure a fifteen days notice shall 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 shall be issued by the builder upto another thirty days. In case of further failure a cancellation letter shall be issued to the allottee and a copy of which shall be endorsed to the DCK. The builder shall not rebook the cancelled unit within thirty days of receipt of copy of cancellation letter by the DCK. Provided that builder shall publish the cancellation notice in the two leading news papers (English and Urdu) under the heading of cancellation of flat or unit.

21.11.2 In response to the above cancellation notice, if the allottee intends to continue the booking, the builder shall 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 installments.

21.11.3 If no response to the DCK is received from the allottee during the said period, the cancellation of the unit shall be confirmed automatically. In case the cancellation is made before allocation, the builder shall refund the total amount paid till that time by the allottee within thirty days. However, after allotment of unit, the builder shall retain four percent of the amount paid that far, and the rest of the amount shall be refunded within thirty days.

21.11.4 In spite of failure to make payment of installments in time, if the builder does not resort to cancellation as provided in these Byelaws, the builder may or may not charge markup at the prevailing bank rate on the unpaid installments and the allottee shall be informed accordingly.

21.12 Loan Component:

21.12.1 The builder may arrange the availability of loan, if the project contains a loan component. If the loan is refused or reduced due to any reason whatsoever by the loan giving agency, the allottee shall pay the loan amount from his own resources. However, extra time of at least six months shall be given to allottee to pay the loan component to the builder.

21.12.2 The allotee must complete all documentation for lease and loan within one hundred and twenty days of booking as written in the

agreement and the builder shall issue a reminder. The repayment of the loan installments shall 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 shall abide by the arrangements of loan, will follow rules, Byelaws, orders and instructions of the loaning agency.

21.13 Documentation and Connection and Meter Charges: Documentation charges for sub-lease and loan, and external services connection charges for gas, electricity, sewerage and water shall be paid in proportion to the unit area in accordance with the actual payment made to these agencies plus fifteen percent 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 shall pay mark up on the amount at the prevailing bank rate.

21.14 Minor Changes: The builder shall 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 the Byelaws and such changes do not affect the structural stability of the building and do not usurp the right of the other allottees.

21.15 Clearance of Dues for Execution of Sub-Lease: The sub-lease of the unit shall 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.

21.16 Timely Completion of the Project: The builder shall 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 shall fulfil the obligation of the timely completion of the project by arranging the deficit finances from his own resources. The builder shall inform the allottees every three months regarding progress of the project.

21.17 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 shall refund total amount paid by the allottee till cancellation within thirty days. However, after the allotment of unit four percent of the amount paid that far, for the unit, shall be retained by the builder and the rest of the amount shall be refunded within thirty days.

21.18 Extension in Date of Completion: Extension in date of completion shall be allowed to a builder if he produces documentary proof that more than fifty percent of his clients have defaulted in payments of two or more installments for over six months period. The builder shall also submit consent of atleast fifty percent of the allottees while applying for the extension in time.

21.19 Sublet and Transfers of Allotment: The allotee can sublet, transfer or sell his unit to any one, with prior written permission of the builder, who shall allow transfer on receipt of all outstanding dues up to that time and transfer fee at rate of half percent of total price of unit. No transfer fees shall be charged in case the transfer is made within three months of allotment.

21.20 Physical Possession and Care taking Charges: The builder shall, after obtaining Occupancy Certificate from the DCK, which shall 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 shall take over possession of the unit within thirty days of receipt of such letter from the builder. In case of delay, the builder shall charge per month as specified in the agreement from the allottee for caretaking of the unit in good condition.

21.21 Delay in Completion and Compensation for Period of Delay: The builder shall complete the project and hand over physical possession of the unit complete in all respect to the allottee by the time specified by the DCK. In case of delay in handing over possession, the builder shall pay mark up to the allottee at the rate of prevailing banks rate on the total amount paid, for the period of delay calculated from the completion time specified by the DCK or extension made thereof.

21.22 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 ten percent 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, shall also be paid by the builder.

21.23 Defect Liability: The builder shall 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 shall be rectified.

21.24 Sale or Transfer of the Project (Excluding Special Projects): No builder shall sell or transfer the whole project to any one for sale, or transfer the units of the project to the general public, unless prior intimation to the DCK is given and No Objection from the two-third majority of the allottees is obtained. The new builder shall assume all responsibility and liabilities of the agreement made between outgoing builder and allottees after completing the transfer procedure as per Transfer Byelaws of DCK. In addition, the new builder must get a fresh NOC from DCK in his favour. In case the owner/transferee fails to comply with these Byelaws, A/B Lease as well as Allotment shall be determined forthwith by DCK.

21.25 Formation of Association and Maintenance of Utilities: The allottees would form an association to handle the affairs of the project and maintenance of the services and amenities. The rights of easement, appurtenances and other common rights shall be transferred to such association.

21.26 Settlement of Disputes: All disputes of the builder and allottee shall be referred to the DCK. Any appeal against the decision made by the authorized officer of the DCK may be filed before the Administrator DCK, whose decision shall be final and binding.

21.27 Instructions of DCK: Besides the above Byelaws, the orders and instructions of the DCK in accordance with these Byelaws, issued from time to time, in this regard shall be followed strictly.

21.28 Use of Amenity Spaces: Common use or amenity spaces, recreational area, parking area in the project shall neither be converted nor mis-utilized but will be used exclusively for the benefits of the allottees of the project as per approved plan.

DCK - DEVELOPMENT & CONSTRUCTION BYELAWS 2017

DCK FORM 1

APPLICATION FOR APPROVAL OF BUILDING PLAN

The Administrator
DHA City, Karachi.

1. In pursuance of Para 1 of DCK – Development & Construction Byelaws 2017. I/We hereby apply for permission to erect/re-erect make additions to and/or alterations in the building on plot No._____ situated at _____ DCK in accordance with the Building Plans submitted herewith for sanction;

2. Necessary particulars are given below and certified to be true:
   a. Plot held from _____
   b. Reference of title deed. (Attach 2 copies each of Allotment order/Transfer order issued by the DCK and of lease 'A' or *'C'* as the case may be).
   c. Intended use of proposed building works; and
   d. Description of the proposed building works

3. Particulars or enclosures:
   a. Five copies of proposed plans with five copies of the site plan issued by the DCK.
   b. Receipt of payment of scrutiny fee
   c. Copy of power of attorney in case the owner is not submitting the plans himself.

4. Mr/Ms_____, Registered Architect/Engineer, Registration No. PEC/PCATP_____ is hereby authorized by me/ us to do all things required to be done under these Byelaws on my/our behalf.

5. I/We undertake that I/we shall be personally responsible for any violation of these Byelaws, if any, accompanying the sanction of the plan/plans.

Signature:_____
Owner/Lessee/Allottee/Attorney

Address: _____
Dated _____

DCK - DEVELOPMENT & CONSTRUCTION BYELAWS 2017

DCK FORM 2

REGISTERED ARCHITECT CERTIFICATE

(To be accompanied with Form 1)

This is to certify that the building plans submitted by_____ for Plot No._____ have been prepared by me/us and that I/we undertake to supervise the proposed construction as per specifications 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 Byelaws.

Name & Signature of Architect_____

Registration No. of PCATP _____

Category of Registration: _____

Date:____/_____/_____.

SPECIFICATIONS ATTACHED:

1. Nature of the soil below foundation
2. Specification of foundation
3. Specification of plinth
4. Specification of superstructure
5. Specification of floor
6. Specification of roof
7. Method of drainage and sewerage
8. Kind of slab

DCK - DEVELOPMENT & CONSTRUCTION BYELAWS 2017

DCK FORM 3

REGISTERED ENGINEER'S CERTIFICATE

(To be accompanied with Form 1)

This is to certify that the building plans submitted by _____ for Plot No._____ have been prepared by me/us and that I/we undertake to supervise the proposed construction as per specifications 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 Byelaws.

Name & Signature of
Civil Engineer/ Structural Engineer_____

Registration No. of PEC _____

Category of Registration: _____

Date:____/_____/_____.

SPECIFICATIONS ATTACHED:

1. Nature of the soil below foundation
2. Specification of foundation
3. Specification of plinth
4. Specification of superstructure
5. Specification of floor
6. Specification of roof
7. Method of drainage and sewerage
8. Kind of slab

DCK - DEVELOPMENT & CONSTRUCTION BYELAWS 2017
DCK FORM 4

CERTIFICATION OF STRUCTURAL SOUNDNESS OF BUILDING

I/we certify that:

1. I/we have been appointed as consulting Structural Engineer by Mr./Mrs./M/s _____for the structural design of the building on Plot No._____ situated on _____DCK on ____/____/_____.Which:

   a. Is likely to be constructed from ____/____/_____.
   b. Is under construction since ____/____/_____.
   c. Has been virtually completed on ____/____/_____.

   d. Stage of construction _____.
   e. No. of storeys designed_____.

2. The structure designed has been based on following codes/ Regulations rationally coupled with Engineering knowledge and judgment where necessary.

   a. The sub-surface investigation was carried out by M/s _____on ____/_____/_____.

   b. A design bearing capacity of _____ Tons/Sft was adopted based on _____

4. Our/my contractual responsibilities were / are limited to:

   a. Structure analysis and design.
   b. Preparation of working structure drawings.
   c. Preparation of bar bending schedule.
   d. Checking bar bending schedule prepared by the contractors/ constructors/ builders.

5. The following documents are attached:
   a. Set of working structural drawings.
   b. Set of bar bending schedule.
   c. Set of design calculations.
   d. Set of specifications relevant to structural work.

Name of Structural Engineer: _____
Signature: _____
DCK Regn No. _____
PEC Regn No. _____

DCK - DEVELOPMENT & CONSTRUCTION BYELAWS 2017

DCK FORM 5

NOTICE OF DISCONTINUANCE

The Administrator
DHA City, 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. _____ situated at_____ DCK. It is certified that the following building work on the said plot has been carried out under my supervision and to my entire satisfaction.

Name & Signature(s) of Architect/ Civil Engineer/ Structural Engineer _____
Registration No. of PEC/PCATP _____
Category of Registration: _____

Date:____/_____/_____.

Description of the work:

1.
2.
3.
4.
5.

Copy to:-

_____
(Owner's Name)

_____
(Owner's Address)

_____

DCK - DEVELOPMENT & CONSTRUCTION BYELAWS 2017

DCK FORM 6

VERIFICATION OF BUILDING AT DIFFERENT CONSTRUCTION STAGES

The Administrator
DHA City, Karachi.

1. I/We hereby inform that I/We have commenced the building works on Plot No._____ located at _____ DCK 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 building line at the above mentioned foundation level/plinth level/Subsequent Floor Level/Stair Tower / Mumty so as 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. _____ situated at _____ DCK has been carried out in accordance with the sanctioned plan (s).

Registered Architect/Engineer _____
Signature: _____
DCK Regn No. _____
PEC/PCATP Regn No. _____

DCK - DEVELOPMENT & CONSTRUCTION BYELAWS 2017

DCK FORM 7

NOTICE OF COMPLETION

The Administrator
DHA City, Karachi.

I/We hereby give notice of completion of building in the building on Plot No._____located at _____ DCK and of drainage and water arrangement therein, and apply for permission for occupation for 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._____ located at _____ DCK 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: _____
DCK Regn No. _____
PEC/PCATP Registration No._____

DCK - DEVELOPMENT & CONSTRUCTION BYELAWS 2017

DCK FORM 8

REGULARIZATION OF WORKS CARRIED OUT WITHOUT PERMISSION

The Administrator,
DHA City, Karachi.

1. Whereas I/We have constructed_____ on Plot No_____ located at_____ DCK 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 so as to make it consistent with the permission of the DCK and also willing to pay the composition fee imposed by the DCK for regularization of illegal construction/deviations from approved plan or in violation of Byelaws. It is, therefore, requested that plans may be regularized by way of composition as per law and permission to occupy the said building may be granted.

Owner's Signatures & Address_____
_____
_____

ARCHITECT'S CERTIFICATE

I/We hereby certify that existing structure on plot No._____ located at _____ has been fully and correctly shown on the plan submitted by me. And I/We further certify that the building is structurally stable. Necessary structural calculations and detail are attached herewith.

Registered Architect/ Structural Engr: _____
Signature: _____
CBC License No. _____
PEC/PCATP Registration No. _____

DCK - DEVELOPMENT & CONSTRUCTION BYELAWS 2017
DCK FORM 9

CONSTRUCTION OF SWIMMING POOL (INDEMNITY BOND)

(For Swimming Pool)
On Rs.100/- Stamp Paper

1. I,_____S/o,D/o,W/o_____ Muslim, Adult, R/o House No._____ solemnly affirmation that I am the owner of Plot No._____, measuring _____ sq yds 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. Proper filtration plant will be erected.
b. The swimming pool will be properly covered for privacy.
c. The same will not be constructed on the compulsory open space.
d. If any damage is done to the neighboring structure due to our swimming pool, it will be our responsibility to make good the losses or in the event of our failure to do so, the owner/DHA may good such repair at our cost or any other measures as deemed fit by the Defence Housing Authority.
e. It will be structurally designed and signed by approval Structural Engineer.

2. That the above declaration is true and correct to the best of my knowledge and belief.

DEPONENT

FORM PSP-1

PAKISTAN DEFENCE OFFICERS HOUSING AUTHORITY KARACHI

APPLICATION FORM – NO OBJECTION CERTIFICATE

MANDATORY FOR ALL 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 (Owner)_____ S/o,D/o,W/o_____

CNIC No._____ DHA Membership No._____

Resident of_____

Tel No(s) : Mobile_____ Residential_____ Office_____

I, hereby apply for grant of NO OBJECTION CERTIFICATE (NOC) under Chapter XIII of BC & TP Regulations 2011, 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_____ DHA.

Note: The required information/documents supplied on the prescribed **Project Digest Form (PDF-1)** are attached with **NOC** application.

(1)_____
Signature of Licensed Architect
License No._____
Name_____

_____
Seal of the Consulting Architectural Firm

(2)_____
Signature of Licensed Engineer
License No._____
Name_____

_____
Seal of the Consulting Engineering Firm

(3)_____
Signature of Licensed Architect
License No._____
Name_____

_____
Seal of the Builder/ Construction Co.

(4)_____
Signature of Licensed Engineer
License No._____
Name_____

_____
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. Incomplete applications or carelessly prepared cases shall be rejected by the Authority. Applications containing incorrect information or mis-representation of facts shall 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 and papers 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 (2 x 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) shall be issued by DHA 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 Security Deposit shall be deposited by the owner/builder before issuance of NOC for sale.

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) Name of Architect:
      (with License No.) _____

      (2) Name of Structural Engineer:
      (with License No.) _____
      (3) Name Site Engineer _____
      (4) Name of Site Supervisor _____

   g. **Either Project is New/On-Going**

      (1) New/On-Going _____
      (2) Date of Start _____

   h. **Plot Detail**

      (1) Category: Residential/Commercial/Industrial (Tick One)
      (2) Address: _____
      (3) Area: _____ Sq.Yds

_____
SEAL AND SIGNATURE OF THE APPLICANT

j. **Organizational Set-Up of the Owner/Builder**

(1) Proprietorship/Partnership Firm/Limited Firm/Private or Public Concern _____

(2) Enclose Memorandum and Article of Association/Certificate from Registrar of Firms of the Owner/Builder (Flag – **A**) _____

k. **All Dues Clearance Certificate from PDOHA (Finance Directorate)** (Attach Copy – Flag – **B**)

l. **Income Tax Registration on ATL (Active Tax Payers List) – (Yes ☐ No ☐)**

2. **Documents**

a. **Ownership Documents** (Enclose attested copies of the following documents)

(1) Allotment/Transfer/Mutation (Flag – **C**)
(2) Copy of A/C Lease (whichever is applicable) (Flag - **D**)
(3) Valid Site Plan (Flag - **E**)
(4) Power of Attorney duly Registered in DHA (if applicable) (Flag – **F**)
(5) CNIC (Flag – **G**)

b. **Building Plan** (Enclose attested copies of the following documents)

(1) Approved Building Plan/ Revised Building Plan (Flag - **H**)
(2) Completion Certificate from CBC (if applicable – Flag - **J**)
(3) Occupancy Certificate from DHA (if applicable – Flag - **K**)

c. **Time Schedule**

(1) Date of Start of Construction _____
(2) Present Stage of Construction _____
(3) Reasons for Delay (if any) _____
(4) Date of Completion _____
(5) Date of Handing Over Possession of the Units _____
(6) Work program (Specimen attached Flag – **L**)

d. **Price Estimates (Specimen attached – Flag – M)**

_____
SEAL AND SIGNATURE OF THE APPLICANT

e. **Working of the Selling Prices and Relative Documents**

(1) Booked Units

(a) 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) 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 (Sft) (a)	Rate (Sft) (b)	Price Committed c=(a+b)		

(2) Un-Booked Units

(a) 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)		

(b) 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

(3) **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**)

(4) **Total Number of Units**
- (a) Residential @ _____ Nos.
- (b) Commercial @_____ Nos.
- (c) Others @ _____ Nos.

(5) **In Case of Revision**
- (a) Justification for Revision
- (b) Revised Priced BOQ & Quotation for extra items (Flag **Z**)

f. **Maintenance procedure and Terms & Conditions after completion of the project** (Flag – **AA**)

g. **Allocation and Booking Plan** (Flag – **BB**)

h. **Agreement of Construction b/w Owner & Builder** (Flag – **CC**)

i. **Undertaking from the Owner/Builder on Stamp Paper** (Specimen attached Flag – **DD**)

j. **Undertaking from the Consulting Architect on their Letter Head** (Specimen attached Flag - **EE**)

k. **Undertaking from the Consulting Engineer on their Letter Head** (Specimen attached Flag – **FF**)

l. **Builder's License:** Enclose attested copy of the license duly renewed (Flag – **GG**)

m. **Draft of Advertisement:** Enclose 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 upto 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 % 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 = Total Cost of the Project / Total leasable area of the units in sqft. = _____ = Rs. _____ per sft

_____
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 will be offered for sale/rent to the public through advertisement.

1. That we will carry-out the construction strictly according to the approved plan and specification granted by CBC/P.D.O.H.A Karachi.

2. That we will use standard material as required under the code of practice specified.

3. That we will not mis-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 will start the project on _____
Day / Month / Year

5. That we will accept the prices as fixed and final and shall not increase / revise them under any circumstances till 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 will 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 will provide the service i.e. water supply, sewerage disposal etc alongwith electricity and Gas supply through the concerned authorities to all allot tee's unit before completion of the project.

9. That we will complete the formalities for lease and loan from the relevant Departments and will 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 shall be undertaken by Engineer _____

    PEC Engineer No_____

12. That we will 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 will intimate the allottee of the situation and deal with the matter according to the provisions of Building Control & Town Planning Regulations 2011 P.D.O.H.A Karachi of amended up-to-date.

15. That we will 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 will follow and strictly abide the provisions of Building Control & Town Planning Regulations 2011 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 will 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 2011 P.D.O.H.A Karachi and the plans have been approved by the Authority vide their letter No._____

3. That we will supervise the construction work through all stages of execution and will do the work strictly according to the approved plan and specifications.

4. That we will not make changes in the approved plans without approval of the Authority P.D.O.H.A Karachi.

5. That we will be responsible for all defects planning design and construction of the project.

6. That we will be responsible for building strength and quality control.

7. That we will 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.

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 2011 P.D.O.H.A Karachi and the plans have been approved by the Authority vide their letter No._____

3. That we will supervise the construction work through all stages of execution and will do the work strictly according to the approved plan and specifications.

4. That we will not make changes in the approved plans without approval of the Authority P.D.O.H.A Karachi.

5. That we will be responsible for all defects planning design and construction of the project.

6. That we will be responsible for building strength and quality control.

7. That we will 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.

DCK - DEVELOPMENT & CONSTRUCTION BYELAWS 2017

DCK FORM 11

SUBMISSION OF ALTERNATIVE POWER PROPOSAL OF BUILDING PLAN

To,
DHA City
Karachi.

I/We M/S _____ certify that we/our consulting MEP Engineer Mr./Mrs/M/s _____ had submitted drawings/documents as per the attached RE Proforma for the alternative power (solar/wind) installation on my house on Plot No. _____ situated on _____ DCK on

Home Owner

_____

_____

Dated: ___/___/_____.

Name: _____ House No: _____

Building Category: □ Residence □ Commercial □ Mixed use

1. Plot Size:_____ sq yds
2. 30% of the total electricity connected load capacity has been connected through Alternative Renewable Energy power.[Note] □ Yes □ No
3. RE power system has been grid connected for Net Metering □ Yes □ No
4. I plan to install: □ Solar □ Wind □ Both
5. I plan to install: □ On grid □ Hybrid
6. Solar PV Power Installed Capacity _____ KW.
7. Solar PV Manufacturer:
   _____
8. Support Structure: Aluminum / Steel
9. I plan to use following Batteries for my solar hybrid system:-
   a. Manufacturer: _____
   b. Capacity: _____
10. Cables Types/ Manufacturer:
    _____
11. Safety switches/ Cut out manufacturer:
    _____
12. I plan to install Wind Power with following data:
    a. Manufacturer
    b. Type: □ Horizontal Axis □ Vertical Axis
    c. Pole Material
    d. Controller:
    e. Inverter:

Notes:

- For Minimum Required alternative RE Power see Appendix "I"
- Only DHA Authority's approved Net Meters are allowed.
- Only net metering capability of hybrid inverters are allowed
- On grid inverter power line shall be connected to the Main Breaker of Distribution Box (DB) although hybrid inverter can be connected to the desired distributed breakers in the DB.

Villas , Farm Houses & Commercial Load

Sr. No.	Description	Electrical Total Demand Load in K.W	Renewable Energy 30% of Total Load in K.W	Remarks
1	125 SQ. YARDS (G + 1ST FLOOR)	**14.00**	**4.20**	
2	200 SQ. YARDS (G + 1ST FLOOR)	**17.00**	**5.10**	
3	250 SQ. YARDS (G + 1ST FLOOR)	**18.00**	**5.40**	
4	300 SQ. YARDS (G + 1ST FLOOR)	**19.00**	**5.70**	
5	400 SQ. YARDS (G + 1ST FLOOR)	**25.00**	**7.50**	
6	400 SQ. YARDS (B + G + 1ST FLOOR)	**28.00**	**8.40**	
7	500 SQ. YARDS (G + 1ST FLOOR)	**32.00**	**9.60**	
8	600 SQ. YARDS (G + 1ST FLOOR)	**36.00**	**10.80**	
9	800 SQ. YARDS (G + 1ST FLOOR)	**40.00**	**12.00**	
10	1000 SQ. YARDS (G + 1ST FLOOR)	**45.00**	**13.50**	
11	2000 SQ. YARDS FARM HOUSE (GROUND FLOOR)	**23.00**	**6.90**	
12	2500 SQ. YARDS FARM HOUSE (GROUND FLOOR)	**26.00**	**7.80**	
13	3000 SQ. YARDS FARM HOUSE (GROUND FLOOR)	**30.00**	**9.00**	
14	MIX USE BUILDING (B + G + 4th FLOOR)	**110.00**	**33.00**	
15	COMMERCIAL BUILDING (B + G + 3th FLOOR)	**150.00**	**45.00**	

DCK - DEVELOPMENT & CONSTRUCTION
DCK FORM 12
SUBMISSION OF FIRE SAFETY PRECAUTIONS OF BUILDING PLAN
(For F.A.R. Based Buildings)

DHA City,
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 _____DCK on Dated:____/____/_____.

FIRE SAFETY PRECUATION APPROVAL CHECKLIST

Unique Project Ref:
Project Title:
Building Type: ☐ Mixed Use Building ☐ Commercial

DHA CITY Project Officer:

Fire Safety Precautions are available to download from (mention website link)

S.NO	DCK BYE LAWS REF. NO :	FIRE SAFETY SYSTEMS	Quantity Provided (NOs/Dims.)	TYPE	MAKE	COUNTRY OF ORIGIN	TESTING CERTIFICATES	COMMENTS
1	17.1	Emergency Fire Exits					Yes / No / Not Applicable	
	17.1.1TO 17.1.2	Emergency fire exits of non-combustible material					Yes / No / Not Applicable	
2	17.2	Portable Fire Extinguishing					Yes / No / Not Applicable	
	17.2.1 TO 17.2.3	Two extinguishers in stage area, in each dressing room and one immediately outside each entry in theatres;					Yes / No / Not Applicable	
3	17.3	Fire Escapes/ Emergency Staircase					Yes / No / Not Applicable	
	17.3.1	400 square yards and above shall have at least one emergency staircase					Yes / No / Not Applicable	
	17.3.2	Fire Rated Doors					Yes / No / Not Applicable	
	17.3.3	one emergency staircase located within 100 ft					Yes / No / Not Applicable	
	17.3.4	elevators / lifts					Yes / No / Not Applicable	
	17.3.5	elevators / lifts with in-built emergency landing devices					Yes / No / Not Applicable	
	17.3.6	elevators / lifts with earthquake, seismic sensors installed					Yes / No / Not Applicable	

	17.3.7	All required safety features for elevators					Yes / No / Not Applicable	
	17.3.8	Handicapped Accessibility compliant as per the following ADA requirements					Yes / No / Not Applicable	
	17.3.8.1	Elevator hall and car buttonsas per ADA requirements					Yes / No / Not Applicable	
	17.3.8.2	Braille plates					Yes / No / Not Applicable	
	17.3.8.3	Two way communication					Yes / No / Not Applicable	
	17.3.8.4	Chimes / verbal announcements					Yes / No / Not Applicable	
	17.3.8.5	Accommodation of a wheelchair					Yes / No / Not Applicable	
	17.3.8.6	Door protective / re-opening devices					Yes / No / Not Applicable	
	17.3.8.7	Emergency control					Yes / No / Not Applicable	
	17.3.8.8	Handrails Heights					Yes / No / Not Applicable	
4	17.4	Stand Pipe Equipment (Hose Reel)					Yes / No / Not Applicable	
	17.4.1	Stand pipes standards as per following:					Yes / No / Not Applicable	
	17.4.1.1	Not less than 2.5 inch dia pipes					Yes / No / Not Applicable	
	17.4.2	Number of standpipes					Yes / No / Not Applicable	
	17.4.3	Standpipes location					Yes / No / Not Applicable	
	17.4.4	Galvanized iron/gun metal					Yes / No / Not Applicable	
	17.4.5	Stand pipe risers					Yes / No / Not Applicable	
	17.4.6	More than one stand pipe they shall be interconnected at their bases by pipes equal in size					Yes / No / Not Applicable	
	17.4.7	Fire department approved in-let connection					Yes / No / Not Applicable	
	17.4.8	Every storey with a one and half inch dia flexible hose not less than one hundred feet long, with a half inch nozzle, being in an approved rack or cabinet					Yes / No / Not Applicable	
	17.4.9	Standpipe shall be fed by an overhead water tank reserved solely for this purpose					Yes / No / Not Applicable	
5	17.5	Dry Riser					Yes / No / Not Applicable	
	17.5.2	A dry riser & Wet Risers					Yes / No / Not Applicable	
	17.5.3	Present 3 components to meet BS 5041 BS 5306, BS 9990 or other National Fire Protection association (NFPA) equivalent					Yes / No / Not Applicable	

6	17.6	External Inlets					Yes / No / Not Applicable	
	17.6.1	External cabinet or enclosure marked “DRY RISER INLET”					Yes / No / Not Applicable	
7	17.7	Pipe Work					Yes / No / Not Applicable	
	17.7.1	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	
	17.7.3	Vent Pipe					Yes / No / Not Applicable	
8	17.8	Outlet Points					Yes / No / Not Applicable	
9	17.9	Automatic Sprinkler System					Yes / No / Not Applicable	
	17.9.1	Every public use / institutional building which serves restrained or handicapped persons.					Yes / No / Not Applicable	
	17.9.2	Covered car parking areas					Yes / No / Not Applicable	
	17.9.3	Out garages or terminals					Yes / No / Not Applicable	
	17.9.4	Cottage manufacturing display or sale of combustible materials and products					Yes / No / Not Applicable	
	17.9.5	All areas of theatres except auditorium, music hall and lobbies					Yes / No / Not Applicable	
	17.9.6	All building areas used primarily for storage of goods					Yes / No / Not Applicable	
	17.9.7	immediate vicinity of generators or any electrical equipment					Yes / No / Not Applicable	
	17.9.8	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	17.10	Construction of sprinkler System					Yes / No / Not Applicable	
	17.10.1	Suitably Marked "Fire department connection-Automatic sprinklers"					Yes / No / Not Applicable	
	17.10.2	Automatic sprinkler system shall be fed by overhead water tank reserved					Yes / No / Not Applicable	
	17.10.3	set off automatic alarm system simultaneously					Yes / No / Not Applicable	

	17.10.4	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:

Address:_____
_____

Registered Architect/Engineer_____

Signature & Seal:_____

DCK - DEVELOPMENT & CONSTRUCTION
DCK FORM 12
SUBMISSION OF FIRE SAFETY PRECAUTIONS OF BUILDING PLAN
(For Fixed Floor Buildings)

DHA City,
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 _____DCK on Dated:____/____/_____.

FIRE SAFETY PRECUATION APPROVAL CHECKLIST

Unique Project Ref:
Project Title:
Building Type: ☐ Mixed Use Building ☐ Commercial

DHA CITY Project Officer:

Fire Safety Precautions are available to download from (mention website link)

S.NO	DCK BYE LAWS REF. NO :	FIRE SAFETY SYSTEMS	Quantity Provided (NOs/Dims.)	TYPE	MAKE	COUNTRY OF ORIGIN	TESTING CERTIFICATES	COMMENTS
1	17.1	Emergency Fire Exits					Yes / No / Not Applicable	
	17.1.1TO 17.1.2	Emergency fire exits of non-combustible material					Yes / No / Not Applicable	
2	17.2	Portable Fire Extinguishing					Yes / No / Not Applicable	
	17.2.1 TO 17.2.3	Two extinguishers in stage area, in each dressing room and one immediately outside each entry in theatres;					Yes / No / Not Applicable	
3	17.3	Fire Escapes/ Emergency Staircase					Yes / No / Not Applicable	
	17.3.1	400 square yards and above shall have at least one emergency staircase					Yes / No / Not Applicable	
	17.3.2	Fire Rated Doors					Yes / No / Not Applicable	
	17.3.3	one emergency staircase located within 100 ft					Yes / No / Not Applicable	
	17.3.4	elevators / lifts					Yes / No / Not Applicable	
	17.3.5	elevators / lifts with in-built emergency landing devices					Yes / No / Not Applicable	

	17.3.6	elevators / lifts with earthquake, seismic sensors installed					Yes / No / Not Applicable	
	17.3.7	All required safety features for elevators					Yes / No / Not Applicable	
	17.3.8	Handicapped Accessibility compliant as per the following ADA requirements					Yes / No / Not Applicable	
	17.3.8.1	Elevator hall and car buttonsas per ADA requirements					Yes / No / Not Applicable	
	17.3.8.2	Braille plates					Yes / No / Not Applicable	
	17.3.8.3	Two way communication					Yes / No / Not Applicable	
	17.3.8.4	Chimes / verbal announcements					Yes / No / Not Applicable	
	17.3.8.5	Accommodation of a wheelchair					Yes / No / Not Applicable	
	17.3.8.6	Door protective / re-opening devices					Yes / No / Not Applicable	
	17.3.8.7	Emergency control					Yes / No / Not Applicable	
	17.3.8.8	Handrails Heights					Yes / No / Not Applicable	
4	17.4	Stand Pipe Equipment (Hose Reel)					Yes / No / Not Applicable	
	17.4.1	Stand pipes standards as per following:					Yes / No / Not Applicable	
	17.4.1.1	Not less than 2.5 inch dia pipes					Yes / No / Not Applicable	
	17.4.2	Number of standpipes					Yes / No / Not Applicable	
	17.4.3	Standpipes location					Yes / No / Not Applicable	
	17.4.4	Galvanized iron/gun metal					Yes / No / Not Applicable	
	17.4.5	Stand pipe risers					Yes / No / Not Applicable	
	17.4.6	More than one stand pipe they shall be interconnected at their bases by pipes equal in size					Yes / No / Not Applicable	
	17.4.7	Fire department approved in-let connection					Yes / No / Not Applicable	
	17.4.8	Every storey with a one and half inch dia flexible hose not less than one hundred feet long, with a half inch nozzle, being in an approved rack or cabinet					Yes / No / Not Applicable	
	17.4.9	Standpipe shall be fed by an overhead water tank reserved solely for this purpose					Yes / No / Not Applicable	
5	17.5	Dry Riser					Yes / No / Not Applicable	

	17.5.1	A dry riser (supply system intended to distribute water to multiple levels or compartments of a building, as a component of its fire fighting systems)					Yes / No / Not Applicable	
	17.5.3	Present 3 components to meet BS 5041 BS 5306, BS 9990 or other National Fire Protection association (NFPA) equivalent					Yes / No / Not Applicable	
6	17.6	External Inlets					Yes / No / Not Applicable	
	17.6.1	External cabinet or enclosure marked "DRY RISER INLET"					Yes / No / Not Applicable	
7	17.7	Pipe Work					Yes / No / Not Applicable	
	17.7.1	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	
	17.7.3	Vent Pipe					Yes / No / Not Applicable	
8	17.8	Outlet Points					Yes / No / Not Applicable	
	17.8.1	Outlets (Landing Valves)					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:

Address:_____
_____

Registered Architect/Engineer_____

Signature & Seal:_____

List of Abbreviations

DCK	-	DHA City Karachi
SMPIC	-	Sustainable Master Plan Image Concept
CBD	-	Central Business District
COS	-	Compulsory Open Space
PEC	-	Pakistan Engineering Council
PCATP	-	Pakistan Council of Architectures and Town Planners
FAR	-	Floor Area Ratio
HVAC	-	Heat Ventilating 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