# UNIFIED BUILDING BYE LAWS FOR DELHI 2016

**(Incorporating Amendments upto 12th February 2020)**


**DELHI DEVELOPMENT AUTHORITY**

# UNIFIED BUILDING BYE LAWS

# FOR

# DELHI 2016

(Incorporating Amendments upto 12th February 2020)

## DELHI DEVELOPMENT AUTHORITY

# ABBREVIATIONS USED

| | |
|---|---|
| AAI | Airport Authority of India |
| AHU | Air Handling Unit |
| ASI | Archaeological Survey of India |
| BBL | Building Bye Laws |
| BEE | Bureau of Energy Efficiency |
| BIS | Bureau of Indian Standards |
| BS | Battery Swap |
| BUA | Built Up Area |
| CAF | Common Application Form |
| CCTV | Close Circuit Television |
| CFO | Chief Fire Officer |
| COCCRF | Common Occupancy-cum-Completion Certificate Request Form |
| CPHEEO | Central Public Health and Environmental Engineering Organization |
| CPWD | Central Public Works Department |
| CSP | Community Service Personnel |
| CVs | Commercial Vehicles |
| DCR | Development Control Regulations |
| DDA | Delhi Development Authority |
| DE | Developer Entity |
| DFS | Delhi Fire Service |
| DJB | Delhi Jal Board |
| DMA | Disaster Management Authority |
| DMRC | Delhi Metro Rail Corporation |
| DUAC | Delhi Urban Art Commission |
| ECBC | Energy Conservation Building Code |
| ECC | Environment Clearance Certificate |
| ECS | Equivalent Car Space |
| ECBC | Energy Conservation Building Code |
| EDMC | East Delhi Municipal Corporation |
| EIA | Environmental Impact Assessment |
| ESS | Electric Sub Station |
| EV | Electric Vehicle |
| EVSE | Electric Vehicle Supply Equipment |
| EWS | Economically Weaker Section |
| FC | Fast Charger / Fast Charging (DC and a few AC ones) |
| FCB CS | Fluid Cooled Battery Charging Station |
| FTE | Full Time Equivalent |
| GHG | Green House Gases |
| GNCTD | Govt. of National Capital Territory of Delhi |
| GOI | Govt. of India |

| | |
|---|---|
| GRIHA | Green Rating for Integrated Habitat Assessment |
| FAR | Floor Area Ratio |
| FDI | Foreign Direct Investment |
| HCC | Heritage Conservation Committee |
| HT | High Tension |
| HVAC | Heat Ventilation & Air Conditioning |
| IGBC | Indian Green Building Council |
| IPCC | Intergovernmental Panel on Climate Change |
| ISBT | Inter State Bus Terminal |
| LBZ | Lutyens' Bungalow Zone |
| IT | Information Technology |
| LDRA | Low Density Residential Area |
| LDRP | Low Density Residential Plot |
| LED | Light Emitting Diode |
| LEED | Leadership in Energy and Environment Design |
| LPG | Liquefied Petroleum Gas |
| LPF | Litre Per Flush |
| LSC | Local Shopping Centre |
| LT | Low Tension |
| MCD | Municipal Corporation of Delhi |
| MEP | Mechanical, Electrical and Plumbing |
| MOEF& CC | Ministry of Environment and Forest & Climate Change |
| MoUD | Ministry of Urban Development |
| MPD | Master Plan of Delhi |
| MRTS | Mass Rapid Transit System |
| NBC | National Building Code |
| NCT | National Capital Territory |
| NDMC | New Delhi Municipal Council |
| NMA | National Monument Authority |
| NSP | Network Service Provider (information network) |
| North DMC | North Delhi Municipal Corporation |
| NOC | No Objection Certificate |
| NR | No Restriction |
| PBX | Private Branch Exchange |
| PABX | Private Automatic Branch Exchange |
| PCS | Public Charging Stations |
| PCI | Public Charging Infrastructure |
| Private CI | Private Charging Infrastructure |
| PVs | Passenger Vehicles |
| QA | Quality Auditor |
| RCC | Reinforced Cement Concrete |

| | |
|---|---|
| ROB | Road Over Bridge |
| RUB | Railway Under Bridge |
| ROW | Right of Way |
| SC | Slow Charger / Slow Charging (AC) |
| SP | Service Provider |
| SDMC | South Delhi Municipal Corporation |
| TERI | The Energy and Resource Institute |
| TFL | Tubular Fluorescent Lighting |
| URDPFI | Urban and Regional Development Plan Formulation and Implementation Guidelines, 2014 |
| UNFCC | United Nations Framework Convention on Climate Change |
| WC | Water Closet |
| 2Ws | Two wheelers |
| 3Ws | Three wheelers |
| 4Ws | Four wheelers / PV(cars) |

# DELHI DEVELOPMENT AUTHORITY

## NOTIFICATION

### New Delhi, the 22nd March 2016

### (Unified Building Bye Laws for Delhi 2016)

# Chapter 1
# General

S.O.1191(E):- In exercise of the powers conferred under sub-section (1)Section 57, read with Section 13 of Delhi Development Act-1957, the Delhi Development Authority, with the previous approval of the Central Government hereby make the following regulations.

The regulations earlier notified under these clauses vide Notifications No. S.O. 513, dated 26-2-1959 Gazette of India, Part-II, Section 3 (ii) dated 7-3-1959, as adopted by the Delhi Development Authority, vide Resolution No. 229 dated 1-5-1965 and the Building Bye Laws 1983, published in Extra Ordinary Part IV of Delhi Gazette, published by Government of India(Delhi Administration) vide S. O. No. 104, dated23.06.1983, in force and subsequent resolutions and amendments in Building Bye Laws 1983 were superseded by these Unified Building Bye-Laws for Delhi 2016, notified vide S.O.1191 (E ) dated 22.03.2016.

Thereafter, subsequent amendments/modifications were notified (i) vide S.O. 2479 (E) dated 21.07.2016: Amendment in Para 9.2.5 of the Unified Building Bye-Laws (UBBL) for Delhi 2016; (ii) vide S.O. 1053(E) dated 05.04.2017: Modifications in the Unified Building Bye-Laws (UBBL) for Delhi 2016; (iii) vide S.O. 1502 (E) dated 11.05.2017: Corrigendum to the Modifications in the Unified Building Bye-Laws (UBBL) for Delhi 2016;(iv)vide S.O. 859 (E) dated 28.02.2018: Modification of sub-clause 2.10 in UBBL 2016 Notified vide S.O 1053 (E) dated 5th April 2017; (v) vide S.O. 1487 (E) dated 04.04.2018: Modification in UBBL 2016 Notified vide S.O 1053 (E) dated 5th April 2017 for sub-clauses, simplification of forms/proformas and omission of submission of Bond(s)/Affidavit(s);(vi) vide S.O. 1236 (E) dated 8th March 2019 : Modifications in the Unified Building Bye-Laws (UBBL) for Delhi-2016; (vii) vide S.O. 668 (E) dated 12.02.2020 : Modifications in the Unified Building Bye-Laws (UBBL) for Delhi 2016-2020 which are compiled and incorporated and shall be the integral part of these Unified Building Bye-Laws (UBBL) for Delhi 2016 and shall be read as under:

### 1.0 Short Title, Extent and Commencement

These bye laws shall be called "UNIFIED BUILDING BYE LAWS FOR DELHI 2016". These shall be applicable to the National Capital Territory of Delhi. It shall come into force on such date as the appropriate Government / Authority / Body, by notification in the Official Gazette, appoint.

### 1.1 Jurisdiction

These Unified Building Bye-Laws shall be applicable to the area under jurisdiction of the Delhi Development Authority and concerned local bodies.

### 1.2 Applicability

These building byelaws shall be applicable to all building activities and read in conjunction with specific notifications in respect of urban villages/rural villages, unauthorized regularized colonies and for special areas with regard to regularized resettlement colonies (as mentioned in Chapter 6- Regulations Notified by Delhi Development Authorities). These Bye-laws

shall be reviewed at the end of every five years. The system of implementation of these building byelaws shall be uniform in the Delhi Development Authority and all the concerned local bodies.

## 1.3 Information

1.3.1 In these bye-laws, unless the context otherwise requires the definition given below, under clause 1.4 shall have the meaning indicated against each term.

1.3.2 The words and expressions not defined in these bye-laws shall have the same meaning or sense as in Delhi Development Act, 1957 and Master Plan for Delhi.

1.3.3 All mandatory Master Plan/ Development Control Regulations regarding use, coverage, FAR, set-backs, open spaces, height, number of stories, number of dwelling units, parking standards etc., for various categories of buildings, including modifications therein, made from time to time, shall be applicable mutatis-mutandis in the building Regulations under this clause. All amendments/ modifications made in these Regulations will automatically be included as part of these Unified Building Bye-Laws.

***Note:*** - Extract relating to Development Control Regulations/provisions are reproduced from Master Plan for Delhi.(Chapter 5 and Annexure VI of this document).

1.3.4 All documents such as Acts, Notifications, Rules & Regulations including BIS Codes, National Building Codes, Delhi Fire Service Rules, Indian Electricity Rules, etc. referred in these Building Bye-Laws shall be applicable as amended from time to time. Thus for the current status for any legal, official purpose, the amended provisions issued by the concerned Ministry/departments(s) shall be followed.

## 1.4 Definitions

1.4.1 **Act:** Delhi Development Act, 1957 and Act of other local bodies.

1.4.2 **Air Conditioning:** The process of treating air so as to control simultaneously its temperature, humidity, cleanliness and distribution to meet requirement of conditioned space.

1.4.3 **Alteration:** A structural change, such as an addition to the area or height, or the removal of a part of a building, or any change to the structure, such as the construction of cutting into for removal of any wall, partition, column, beam, joist floor or other support, or a change to or closing of any required means of ingress or egress or a change to the fixture or equipment.

1.4.4 **Approved:** Approved by the Sanctioning Authority.

1.4.5 **Access:** Approach to a plot or a building from a road/ street.

1.4.6 A**ccessory Building:** A building separate from the main building on a plot and containing one or more rooms for accessory use such as servant quarters, garage, store rooms or as shall be classified by the building plan Sanctioning Authority.

1.4.7 **Accessory / Ancillary Use:** Any use of the premises subordinate to the principal use and incidental to the principle/ main use.

1.4.8 **Amenity Space:** A statutory space kept in a layout for amenities such as garbage bin, water supply installation, electricity supply installation, sewage treatment plant and includes other utilities, services and conveniences, as provided according to planning norms in layout plan.

1.4.9 **Atrium/ Atria:** It is a partly/ fully enclosed space with a minimum double height which is partly/ fully covered with light roofing/ R.C.C and could be constructed upon. In a building, there may be more than one atrium at ground or at any other level. Ground coverage and F.A.R to be as per MPD.

1.4.10 **Sanctioning Authority:** The Delhi Development Authority, New Delhi Municipal Council, South Delhi Municipal Corporation, North Delhi Municipal Corporation, East Delhi Municipal Corporation, Delhi Cantonment Board hereinafter called the 'Sanctioning Authority'.

1.4.11 **Automatic Sprinkler System:** A system of water pipes fitted with sprinklers heads at suitable intervals and heights and designed to actuate automatically, control and extinguish a fire by discharge of water.

1.4.12 **Automatic Fire Detection and Alarm System:** Fire alarm system comprising of components for automatically detecting a fire, initiating an alarm of fire and other actions as appropriate.

***Note:*** *The system shall also include manual fire alarm call points.*

1.4.13 **Balcony**: A horizontal cantilevered/non-cantilevered/projected slab including parapet and handrail balustrade, at any floor level including terrace to serve as a passage or sit out place with at least one side fully open, except being provided with railing or parapet wall for safety.

1.4.14 **Basement or Cellar:** The lower story of a building below or partly below ground level.

1.4.15 **Building:** Any structure for whatsoever purpose and whatsoever material constructed and every part thereof whether used as human habitation or not and includes foundation, plinth walls, floors, roofs, chimneys, and building services, fixed platforms, verandahs, balcony, or projection part of a building anything affixed thereto or any wall enclosing or intended to enclose any land or space and signs and outdoor display structures, monuments, memorials or any contrivance of permanent nature/stability built under or over ground .

1.4.16 **Building Height:**

a. The vertical distance in the case of flat roofs is measured from the highest surrounding road level/ ground level up to the top of structural slab, excluding machine room, irrespective of location of entry level.

b. In the case of pitched roofs, up to the point where the external surface of the outer wall intersect the finished surface of the sloping roof, and in case of gable facing the road, the mid-point between the eaves level and the ridge.

c. Architectural features serving no other function except that of decoration and other building components mentioned in clause no 7.19 shall be excluded for the purpose of taking height.

d. If the building does not abut on a street, the height shall be measured from the highest level of the ground immediately adjacent to the building.

1.4.17 **Building Line:** The line up to which the plinth of a building adjoining a street or an extension of a street or on a future street may lawfully extend. It includes the lines prescribed in the MPD or specifically indicated in any Scheme or Layout Plan, or in these Bye-Laws.

1.4.18 **Built up Area:** The area covered by a building on all floors within the premise, used for activities or use, including cantilevered portion, basement, stilt/podium, utility, services, mezzanine floors (if any), other similar areas.

1.4.19 **Cabin / Guard Hut:** A room constructed with non-load bearing partition/partitions with minimum width of 2.0 m, provided light and ventilation standards prescribed in these bye-laws are met with or the provision of light and ventilation is to the satisfaction of the Sanctioning Authority.

1.4.20 **Canopy:** A cantilevered projection over an entrance.

1.4.21 **Chhajja:** A continuous sloping or horizontal overhang.

1.4.22 **Chimney:** The construction by means of which a flue is formed for the purpose of carry¬ing the products of combustion from a heat producing appliance to the open air. Chimney includes chimney stack and the flue pipe.

1.4.23 **Combustible Material:** A material, if it burns or adds heat to a fire when tested for combustibility in accordance with good practice.

1.4.24 **Conversion:** The change in nature of occupancy to another occupancy or part thereof resulting into change of use.

1.4.25 **Courtyard:** A space permanently opens to the sky, enclosed fully or partially by build¬ings within the building envelope.

1.4.26 **Curtain Wall:** Curtain wall is a system in the form of structural glazing or any other energy efficient material to improve the energy efficiency of the building which does not form the part of the structural system of the parent building.

1.4.27 **Covered Area:** Ground area covered immediately above the plinth level covered by the building but does not include the spaces; defined in clause 7.17.

1.4.28 **Damp Proof Course:** A course consisting of some appropriate waterproofing material provided to prevent penetration of dampness or moisture.

1.4.29 **Detached Building:** A building whose walls and roofs are independent of any other building with open spaces on all sides as specified.

1.4.30 **Drain:** A line of pipes including all fittings and equipment such as manholes, inspection chambers, traps, gullies and floor traps used for the drainage of a building, or a number of buildings or yards appurtenant to the buildings, within the same curtilage. Drain shall also include open channels used for conveying surface water.

1.4.31 **Drainage:** The removal of any liquid by a system constructed for this purpose.

1.4.32 **Dwelling Unit / Tenement:** An independent housing unit with separate facilities for living, cooking (maximum one kitchen)and sanitary requirement

1.4.33 **Enclosed Staircase:** A staircase separated by fire resistant walls from the rest of the building.

1.4.34 **Entrance:** A doorway or a passage way used as a means of accessing a building or a site.

1.4.35 Existing Building or Use: A building, structure or its use as sanctioned/approved/ regularized by the Sanctioning Authority, existing before the commencement of the bye-laws.

1.4.36 Exit: An exit may be a doorway; corridor; passageway(s) to an internal staircase, or external staircase, or to a verandah or terrace(s), which have access to the street, or to the roof of a building or a refuge area. An exit may also include a horizontal exit leading to an adjoining building at the same level.

a. **Vertical Exit:** A Vertical exit is a means of exit used for ascension or descension between two or more levels including stairways, fire towers, ramps, and fire escapes.

b. **Horizontal Exit:** A horizontal exit is a protected opening, through or around a fire wall a bridge connecting two buildings.

1.4.37 **Outside Exit:** An outside exit is an exit from the building to a public way, to an open area leading to public way or to an enclosed fire resistive passage leading to a public way.

1.4.38 **Escalator:** A power driven, inclined, continuous stairway used for raising or lowering passengers or goods.

1.4.39 **External Wall:** An outer wall of a building not being a party wall even though adjoining a wall of another building and also means a wall abutting on an interior open space of any building.

1.4.40 **Fire Lift:** One of the lifts specially designed for use by fire service personnel in the event of fire.

1.4.41 **Fire Door:** A fire-resistive door approved for openings for fire separation.

1.4.42 **Fire Resisting Material:** The materials or elements of construction having property to withstand the standard fire exposure.

1.4.43 **Fire Resistance:** The time during which it fulfils its function of contributing to the fire safety of a building when subjected to prescribed conditions of heat and load or restrain. The fire resistance test of structures shall be done in accordance with good practice.

1.4.44 **Fire Separation:** The distance in meters measured from other building on the site, or from other site, or from the opposite of a street or other public space to the building.

1.4.45 **Fire Service Inlets:** A connection provided at the base of a building for pumping up water through inbuilt firefighting arrangements by fire service pumps in accordance with the recommendation of the Delhi Fire Service.

1.4.46 **Fire Tower:** An enclosed staircase which can only be approached from the various floors through landings or lobbies separated from both the floor areas and the staircase by fire resisting doors and open to the outer air.

1.4.47 **Floor:** The lower surface in a storey on which one normally walks in a building. The general term, floor, unless otherwise specifically mentioned, shall not refer to a mezzanine floor.

***Note:*** *The sequential numbering of floor shall be determined by its relation to the determin¬ing entrance level. For floors at or wholly above ground level the lowest floor in the building with direct entrance from the road/street shall be termed as Ground floor, the other floors above ground Floor shall be numbered in sequence as Floor 1, Floor 2, etc. with number increasing upwards.*

1.4.48 **Floor Area Ratio (F AR):** The quotient obtained by dividing the total covered area (plinth area) on all floors multiplied by 100 by the area of the plot.

$$\text{FAR} = \frac{\text{Total covered area of all floors x 100}}{\text{Plot Area}}$$

1.4.49 **Footing:** A foundation unit constructed in brick work, masonry or concrete under the base of a wall or column for the purpose of distributing the load over a large area.

1.4.50 **Foundation:** That part of the structure which is in direct contact with and transmitting loads to the ground.

1.4.51 **Fountain:** An artificially created jet or stream of water with or without structural form

1.4.52 **Gallery:** An intermediate floor or platform projecting from a wall of an auditorium or a hall providing extra floor area, additional seating accommodation etc.

1.4.53 **Garage, Private:** A building or out-house designed or used for the storage of private owned motor driven or other vehicles.

1.4.54 **Garage, Public:** A building or portion thereof designed other than a private garage, operated for gain, designed or used for repairing, servicing, hiring, selling or storing motor driven or other driven vehicle.

1.4.55 **Gazebo:** A freestanding or attached to garden wall, roofed, usually open-sided structure providing a shady resting place and ornamental features for gardens. Some gazebos in public parks are large enough to serve as bandstands or rain shelters.

1.4.56 **Grievance Redressal Committee:** A committee for addressing complaints/difficulties/ appeals and providing appropriate redressal in a time bound manner.

1.4.57 **Ground Coverage:** The portion of the building within the maximum outer surface of the structural wall/column/ slab measured at ground level shall be considered as ground coverage (excluding the mentioned limits of projection/ balcony/canopy /porch /void/shaft/cladding/ curtain wall etc.– refer 7.17.2 & 8.10)

1.4.58 **Habitable Room:** A room occupied or designed for occupancy by one or more persons for study, living, sleeping, eating and kitchen if it is used as living room, but not including bathrooms, water closet compartments, laundries serving and storage pantries, corridors, cellars, attics and spaces that are not used frequently or during extended periods.

1.4.59 **Helipad:**A prepared area designated and used for takeoff and landing of helicopter.

1.4.60 **High Rise:**Any buildings of 15m and above height shall be considered as high rise building.

1.4.61 **Jhamp:** A downward, vertical or sloping projection hanging below any horizontal projection like balcony, canopy, verandahs, passage etc., to provide protection from direct sun and rain.

1.4.62 **Jhot:** Strip of land permanently left open for drainage purposes not to be used as an access way and is not a street or be included as a part of setbacks.

1.4.63 **Kiosk:** A booth operating for selling small consumables such as newspapers, magazines, street maps, confectionary, tea, coffee etc.

1.4.64 **Ledge or Tand:** A shelf-like projection supported in any manner whatsoever except by means of vertical supports within a room itself but not having projection wider than 0.75 m and at a minimum clear height of 2.2 meters from the floor level.

1.4.65 **Lift:** An appliance designed to transport persons or materials or vehicle between two or more levels in vertical or substantially vertical directions, by means of a guided car platform

1.4.66 **Lift Machine:** Part of the lift equipment comprising the motor(s) and the control gear there with, reduction gear (if any), brakes and winding drum or sheave, by which the lift car is raised or lowered.

1.4.67 **Lift Well:** Unobstructed space within an enclosure provided for the vertical movement of the lift car(s) and any counter weights, including the lift pit and the space for top clearance.

1.4.68 **Loft:** An intermediary space created by introduction of a slab between floor and ceiling of a room, passage or wherever it is provided with maximum clear height of 1.5 m for storage purposes only.

1.4.69 **Mumty or Stair Cover:** A structure with a covering roof over a staircase and its landing built to enclose only the stairs for providing protection from weather and not used for human habitation.

1.4.70 **Masonry:** An assemblage of masonry units properly bonded together with mortar.

1.4.71 **Masonry Unit:** A unit whose net cross-sectional area in every plane parallel to the baring surface is 75% or more of its gross cross-sectional area measured in the same plane. It may be either clay brick, stone, concrete block or sand-lime brick.

1.4.72 **Master Plan:** The Master Plan for Delhi approved by the Central Government under the Delhi Development Act. 1957 and the amendments made from time to time.

1.4.73 **Mezzanine Floor:** An intermediate floor between two floor levels above ground floor and at least one side of it form an integral part of space/ floor below.

1.4.74 **Non-Combustible:** A material which does not burn nor add heat to a fire when tested for combustibility in accordance with good practice.

1.4.75 **Occupancy Or Use Group:** The principal occupancy for which a building or a part of a building is used or intended to be used, for the purposes of classification of a building according to the occupancy, an occupancy shall be deemed to include subsidiary occupancies which are contingent upon it. The occupancy classification shall have the meaning given below unless otherwise spelt out in MPD.

a. **Residential Buildings:** These shall include any building in which sleeping accommo¬dation is provided for normal residential purposes with or without cooking or dining or both facilities. It includes one or two or multi-family dwellings, lodging or rooming houses, dormi¬tories/hostels, apartment houses and flats and hotels.

b. **Educational Buildings:** These shall include any building used for school, college, coaching centers (for students more than 20) or day-care purposes for more than 8 hours per week involving assembly for instruction, education or recreation.

c. **Institutional Buildings:** These shall include any building or part thereof which is used for purposes such as medical or other treatment or care of persons suffering from physical or mental illness, disease or infirmity, care of infants, convalescents or aged persons and for penal or correctional detention in which the liberty of the inmates is restricted. Institutional buildings ordinarily provide sleeping accommodation for the occupants. It includes nursing homes, hospi¬tals, sanatoria, custodial institutions and penal institutions like jails, prisons, mental hospi¬tals, reformatories.

d. **Assembly Buildings:** These shall include any building or part of a building where group of people not less than 50 congregate or gather for amusement, recreation social, religious, patriotic civil, travel and similar purposes; for example theatres, banquet hall, motion picture houses, assembly halls, auditoria, exhibition halls, museums, skating rinks, gymnasium, restaurants, places of worship, dance halls, club rooms, passenger stations, and terminals of air surface and other public transportation services, recreation piers and stadia.

e. **Business Buildings:** These shall include any building or part of a building which is used for transaction of business for the keeping of accounts and records for similar pur¬poses, doctors' service facilities, barber shops, city halls, town halls, court houses, libraries shall be classified in this group, so far as principal function of these is transaction of public business and the keeping of books and records.

f. **Mercantile Buildings:** These shall include any building or part of a building which is used as shops, stores, market, for display and sale of merchandise either wholesale or retail. Office, storage and service facilities incidental to the sale of merchandise and located in the same building shall be included under this group.

g. **Industrial Buildings:** These shall include any building or part of a building or structure, in which products or materials of all kinds and properties are fabricated, assembled or processed, refineries, gas plants, mills, dairies, factories, etc.

h. **Storage Buildings:** These shall include any building or part of a building used primarily for the storage or sheltering of goods, wares or merchandise, like warehouses, cold storages, freight depot, transit sheds, store houses/garages, hangars, truck terminals, grain elevators, barns and stables.

i. **Hazardous Building:** These shall include any building or part of building which is used for the storage, handling, manufacture or processing of highly combustible or explosive materials or products which are liable to burn with extreme rapidity and/ or which may pro¬duce poisonous fumes or explosions for storage, handling, manufacturing or processing which involve highly corrosive, toxic or noxious alkalis, acid or other liquids or chemicals pro¬ducing flame, fumes, and explosive, mixtures of dust or which result in the division of matter into fine particles subject to spontaneous ignition.

1.4.76 **Mechanical Ventilation:** The mechanical system(s) or equipment(s) used to circulate air or to replace stale air with fresh air.

1.4.77 **Open Space:** An area, forming an integral part of the site, left open to the sky.

1.4.78 **Owner:** The owner is a person, group of persons, a Company, Trust, Institute, Registered Body, State or Central Government & its attached/ subordinate Departments, Undertaking and like in whose name the property stands registered in the revenue records/ government records/ any other legal documents up to the satisfaction of Sanctioning Authority.

1.4.79 **Parapet:** A low wall or railing built along the edge of a roof or a floor. See 7.22.

1.4.80 **Parking Space:** An area enclosed or unenclosed, covered or open, sufficient in size to park vehicles, together with a driveway connecting the parking space with a street or alley and permitting ingress and egress of the vehicles.

1.4.81 **Partition:** An interior non-load bearing wall, one storey or part storey in height.

1.4.82 **Party Wall:** It includes

a. A wall forming part of a building, and being used or constructed to be used in any part of the height or length of such wall for separation or adorning buildings belonging to different owners or occupied or constructed or adapted to be occu¬pied by different persons; or

b. wall forming part of a building and standing in any part of the length of such wall, to a greater extent than the projection of the footing on one side on grounds of differ¬ent owners.

1.4.83 **Pantry:** A room where food, provisions, dishes or linens are stored and served in an ancillary capacity to the kitchen.

1.4.84 **Pergola:** An arbor or a passageway of columns supporting a roof of trelliswork on which climbing plants are trained to grow

1.4.85 **Pedestal:** An architectural support or base, as for a column or statue

1.4.86 **Permit:** A permission or authorization in writing by the Sanctioning Authorityto carry out the work regulated by the Bye-laws.

1.4.87 **Plinth:** The portion of a structure between the surface of the surrounding ground and surface of the floor, immediately above the ground.

1.4.88 **Plinth Area:** The built up covered area measured at the floor level of the basement or of any storey.

1.4.89 **Plot / Site:** A parcel or piece of land enclosed by definite boundaries and approved by an Sanctioning Authorityas a building site, as part of approved layout plan or special areas/ unauthorized regularized colony/ village abadis/ lal dora/ extended lal dora/ resettlement colonies and slum & JJ cluster/ Rehabilitation Colonies.

1.4.90 **Podium:** A raised platform constructed as top most level of any single/ multilevel parking which can be used for landscaping, plantation, tot-lot, swimming pool, deck, assembly space, movement, building tower/s, parking etc.

1.4.91 **Porch:** A covered surface supported on pillars or otherwise for the purpose of pedes¬trian or vehicular approach to a building.

1.4.92 **Portico:** A porch or walkway with a roof supported by columns, often leading to the entrance of a building

1.4.93 **Pre-Code Building Permit:** Validity of building permit granted before the enforcement of these building bye laws.

1.4.94 **Ramp:** A sloping surface joining two different levels, as at the entrance or between floors of a building.

1.4.95 **Refuge Area:** A location in a building designed to hold occupants during a fire or other emergency, when evacuation may not be safe or possible. Occupants can wait there until rescued or relieved by firefighters.

1.4.96 **Road/Street:** Any highway, street, lane, pathway, alley, stairway, passageway, carriageway, footway, square, place or bridge, whether a thoroughfare or not, over which the public have a right of passage or access or have passed and had access uninterruptedly for a specified period, whether existing or proposed in any scheme, and includes all bunds, chan-nels, ditches, storm-water drains, culverts, sidewalks, traffic islands, roadside trees and hedges, retaining walls, fences, barriers and railings within the street lines.

1.4.97 **Road/Street Level or Grade:** The officially established elevation or grade of the central line of the street upon which plot fronts and if there is no officially established grade, the existing grade of the street at its mid-point.

1.4.98 **Road/Street Line:** The line defining the side limits of a street.

1.4.99 **Room Height:** The vertical distance measured from the finished floor surface to the finished ceiling surface.

1.4.100 **Row Housing:** A row of houses with only front, rear and interior open spaces.

1.4.101 **Semi-Detached Building:** A building detached on three sides with open spaces.

1.4.102 **Service Road:** A road/lane provided at the rear or side of a plot for service purposes.

1.4.103 **Set back area:** An area between the plot boundary and the setback line, size of which is defined as per the provisions of MPD.

1.4.104 **Set Back Line:** A line usually parallel to the plot boundaries or center line of a road and laid down in each case by the Sanctioning Authority or as per recommendations of Master/Zonal Plan, beyond which nothing can be constructed towards the plot boundaries, excepting with the permission of the Sanctioning Authority.

1.4.105 **Site Corner:** A site at the junctions of and fronting on two or more intersecting streets.

1.4.106 **Site, Depth of:** The mean horizontal distance between the front and rear site boundaries.

1.4.107 **Site, Double Frontage:** A site, having a frontage on two streets other than a corner plot.

1.4.108 **Site, Interior or Tandem:** A site, access to which is by a passage from a street whether such passage forms part of the site or not.

1.4.109 **Soffit:** The lowest underside of a structural member such as a beam, coffer slab or flat slab.

1.4.110 **Stack parking:** For parking cars in which a hydraulic lift/ platform is used to place cars in spaces on top of each other.

1.4.111 **Stilt:** Stilt or stilt floor means non habitable portion of a building above ground level consisting of structural columns supporting the super structure with at least two sides open for the purpose of parking cars, scooters, cycles and landscaping. See 7.15.1.

1.4.112 **Storage:** A space where goods of any kind or nature are stored.

1.4.113 **Store Room:** A room used as storage space.

1.4.114 **Storey:** The portion of a building included between the surface of any floor and the surface of the floor next above it, or if there be no floor above it, then the space between any floor and the ceiling next above it.

1.4.115 **Skywalk:** An elevated, usually enclosed walkway between two buildings.

1.4.116 **Terrace:** A flat open to sky roof of a building or a part of a building having parapet, not being a cantilever structure.

1.4.117 **To Abut:** To be positioned juxtaposed to a road, lane, open space, park, building etc.

1.4.118 **To Erect:To erect a building means:** To erect a new building on any site whether previously built upon or not; To re-erect any building of which portions above the plinth level have been pulled down, burnt or destroyed; and conversion from one occupancy to another.

1.4.119 **Sunken Courtyard:** An open sunken space within the plot to provide natural light and ventilation subject to set back restriction with clear fire tender movement passage.

1.4.120 **Travel Distance:** Horizontaldistance to be travelled from any point in a building to a protected escape route, external escape route or final exit.

1.4.121 **Travellator:** A power driven moving path used for transporting people and goods within the same level.

1.4.122 **Trellis:** A structure of open latticework, especially one used as a support for vines and other creeping plants.

1.4.123 **Unsafe Building:** Unsafe buildings are those which are structurally unsafe, insanitary or not provided with adequate means of egress or which constitute a fire hazard or are other¬wise dangerous to human life or which in relation to existing use constitute a hazard to safety or health or public welfare, by reason of inadequate maintenance, dilapidation or abandon-ment and are a danger to human life.

1.4.124 **Verandah:** A covered area, 2.4M deep with at least one side open to the outside with the exception of 1.0 m high parapet/ railing on the upper floors to be provided on the open side.

1.4.125 **Ventilator:** An opening in a wall for ventilating the space inside.

1.4.126 **Water Closet (WC):** A privy with arrangement for flushing the pan with water. It does not include a bathroom.

1.4.127 **Width of Road:** The whole extent of space within the boundaries of road when applied to a new road, as laid down in the surveys of the city or development plans and measured at right angles to the course or intended course of direction of such road.

1.4.128 **Window:** An opening to the outside other than a door which provides all or part of the required natural light or ventilation or both to an interior space and not used as a means of egress/ingress.

1.4.129 **Non-Ambulatory disabilities:** Impairment that, regardless of cause or manifestation, for all practical purposes, confined individuals to wheel chair.

1.4.130 **Semi-Ambulatory disabilities:** Impairment that cause individuals to walk with difficulty or insecurity. Individuals using braces or crutches, amputees, arthritis, spastics and those, with pulmonary and cardiac ills shall be semi-ambulatory.

1.4.131 **Hearing Disabilities:** Deafness or hearing handicaps that might make an individual insecure in public areas because he is unable to communicate or hear warning signals.

1.4.132 **Sight Disabilities:** Total blindness or impairment affecting sight to the extent that the individual functions in public areas is insecure or exposed to danger.

1.4.133 **Wheel chair:** Chair used by disabled people for mobility.

1.4.134 **Private establishment:** means a company, firm, cooperative or other society, associations, trust, agency, institution, organization, union, factory or such other establishment as the appropriate Government may, by notification, specify.

1.4.135 **Public building:** means a Government or private building, used or accessed by the public at large, including a building used for educational or vocational purposes, workplace, commercial activities, public utilities, religious, cultural, leisure or recreational activities, medical or health services, law enforcement agencies, reformatories or judicial foras, railway stations or platforms, roadways bus stands or terminus, airports or waterways.

## 1.5 Interpretation

1.5.1 Part Construction: Where the part of an approved/ regularized building is demolished/ added/ altered or reconstructed, except where otherwise specifically stipulated, these Building Bye-Laws shall apply to the extent of the new work involved.

1.5.2 Change of use / Occupancy: Where use of a building is changed, except where otherwise specifically stipulated, these Building Bye-Laws shall apply to all parts of the building affected by the change; with prior permission from the Delhi Fire Services.

1.5.3 Existing approved building: Nothing in these Bye-Laws shall require the removal, alteration or abandonment, nor prevent continuance of the lawfully established use or occupancy of an existing approved building unless, in the opinion of the Sanctioning Authoritysuch a building is unsafe or constitutes a hazard to the safety of adjacent property or to the occupants of the building itself.

1.5.4 In case of any provision of these building bye-laws require further interpretation/clarification, the matter shall be referred to the Grievance Redressal Committee as constituted under clause 1.8.

1.5.5 In the bye-laws, the use of present tense includes the future tense, the masculine gender includes the feminine and the neuter, the singular number includes the plural and the plural includes the singular. The word 'person' includes a Corporation as an individual, writing includes printing and typing and 'signature' includes thumb impression made by a person who cannot write if his name is written near to such thumb impression.

## 1.6 Pre-Code Building Permit

Where any building permit which has been issued by the Sanctioning Authoritybefore the commencement of these Building Bye-Laws and where construction is in progress and has not been completed within the specified period from the date of such permit, the said permission shall be deemed to be sanctioned under these Bye-Laws and shall only be eligible for revalidation thereunder. Accordingly, where the validity of sanction has expired and construction has not commenced, construction shall be governed by the provisions of these Building Bye-Laws.

## 1.7 Development and Construction

1.7.0 Except hereinafter or otherwise provided, these Bye-Laws shall apply to all development, redevelopment, erection and/or re-erection of a building etc. as well as to the design, construction of, or reconstruction and additions and alterations to a building.

1.7.1 Development permission: No person shall carry out any development or redevelopment including sub-division on any plot or land (not forming part of any approved layout plan or scheme) or cause to be done without obtaining approval from the Sanctioning Authorityfor the Layout Plan.

1.7.2 Building Permit: No person shall erect, re-erect or make addition/ alterations in any building or cause the same to be done without, first obtaining a separate building permit for each such building from the Sanctioning Authority.

1.7.3 Reconstruction: The reconstruction in whole or part of a building which has ceased to exist due to fire, natural collapse or demolition having been declared unsafe, or which is likely to be demolished by or under an order of the Sanctioning Authority as the case may be and for which the necessary certificate has been given by the Sanctioning Authority shall be allowed subject to these Bye-Laws.

## 1.8 Grievance Redressal Committee for Building Bye-laws

In DDA and all the concerned local bodies who implement these building bye-laws, there shall be a Grievance Redressal Committee for building bye laws which shall be headed by a senior officer of the Sanctioning Authority who shall receive complaints/ difficulties/ appeals and provide appropriate redressal in a time bound manner. The above committee shall comprise of:

a. An officer of the concerned local body not below the level of Director / Sr. Architect/Superintendent Engineer or equivalent.

b. A senior officer of DDA not below the level of Director/Sr. Architect or equivalent.

c. Three representatives from the profession, one each from architecture, engineering and town planning, to be nominated by Lieutenant Governor of Delhi.

d. Any other official/ professional may be co-opted if required.

This committee shall be constituted by the chief executive/ head of the Sanctioning Authority and shall have a term of 3 years after which, it shall be reconstituted with a change of members. If the authority/ local body so desires, some or all the members may continue.

This committee shall meet regularly, at least once a month and consider the grievances/ appeals/ queries regarding sanction, completion, interpretation etc. of these bye laws and codes, etc. The decision of this committee shall be final and binding in all matters related to interpretation of these building bye-laws. All decisions taken by this committee shall be recorded in minutes of the meeting and place on the website of the Sanctioning Authority. All grievances/ appeals shall be in the form of an application. Fees if any shall be decided by the Sanctioning Authority.

**1.9 Miscellaneous:** No person shall be entertain for pursuing their cases other than the owner, dully appointed Architect/ Engineer, supervisor or an authorized person having a letter in writing from the owner. So, the owners/applicants are advice to refrain from deputing unauthorized persons to unnecessarily remain on visiting the DDA/ Local bodies offices which serve little constructive purpose.

# Chapter 2

## Procedure and Documentation for Sanction/ Occupancy-cum-Completion of Building Plans

### 2.0 Overview of procedure and general requirement

#### 2.0.1 Procedure

(a) For residential plots up to 105 sq.m in size forming a part of approved layout/ special areas/ unauthorized regularized colony/ village abadis/ lal dora /extended lal dora resettlement colonies and slum & JJ cluster/ Rehabilitation Colonies, excluding those within LBZ, the procedure and documentation shall be as per 'SARAL' scheme given in Chapter 4 of these Bye Laws.

(b) The entire process from applying for sanction of building plan to issue of occupancy-cum-completion certificate shall consist of following steps:

(i) Submission of application for sanction of building plan and NOC applications in Common Application Form (CAF) along with building permit fees, drawings and documents.

(ii) Grant of sanction within stipulated period, Payment of requisite fees & charges, as applicable, and release of sanctioned building plan.

(iii) Intimation of completion of work up to plinth level.

(iv) Plinth level inspection and online issue of plinth level inspection certificate.

(v) Submission of application for issue of Occupancy-cum-Completion Certificate (OCC) and NOCs (Fire, Water etc) in Common Occupancy-cum-Completion Certificate Request Form (COCCRF) along with requisite fees, drawings and documents.

(vi) Single joint site inspection by all concerned departments.

(vii) Intimation of compounding fee and charges, if applicable, and release of OCC along with completion plan.

(c) However, the above procedure shall stand amended to the extent specified in the fast track procedures specified in Chapter 3 based on risk-based classification of buildings.

(d) **Building permit not required:** No notice and building permit is required for addition/alterations which do not otherwise violate any provisions regarding building requirements, structural stability, fire safety requirements and involve no change to the cubic contents or to the built up area of the building, as defined in bye laws, for the following:

i. Plastering/ cladding and patch repairs *.

ii. Re-roofing or renewal of roof including roof of intermediate floor at the same height.

iii. Flooring and re- flooring.

iv. Opening and closing windows, ventilators and doors opening within the owner's plot. No opening towards other's property/ public property will be permitted.

v. Rehabilitation/repair of fallen bricks, stones, pillars, beams etc.

vi. Construction or reconstruction of sunshade not more than 75 cm in width within one's own land and not overhanging over a public street;

vii. Construction or reconstruction of parapet and also construction or re-construction of boundary walls as permissible under these bye-laws;

viii. White washing, painting etc. including erection of false ceiling in any floor at the permissible clear height provided the false ceiling in no way can be put to use as a loft/ mezzanine, etc.

ix. Reconstruction of portions of buildings damaged by storm, rains, fire, earthquake or any other natural calamity to the same extent as existed prior to the damage as per sanctioned plan, provided the use conforms to provisions of MPD.

x. Erection or re-erection of internal partitions provided the same are within the preview of these bye-laws.

xi. For erection of lifts in existing buildings in residential plotted development (low–rise). Change/installation/ rearranging/ relocating of fixture(s) or equipment/s or HVAC-MEP services, UGR,STP/ETP without hindering other's property/public property shall be permitted.

xii. Landscaping

xiii. Public art

xiv. Bank ATM (up to a maximum area of 9.0 sqm only), Public washroom, security room /guard room are permitted in setback area, provided it does not obstruct fire vehicles movement, in plot more than 3000 sqm (other than residential plotted), as per Chapter 12.

xv. Placing a porta cabin upto 4.5 sqm within the plot line subject to free fire tender movement.

***Note:*** *The liability for any structural flaws or defects in the buildings arising out of such additions/ alterations shall rest with the owner/ architect/ engineer/ structural engineer.*

* *For Heritage Buildings, refer Annexure II.*

**2.0.2 Information required from the applicant by the sanctioning authority and other agencies to be provided in CAF and COCCRF**

(a) Information required from the applicant by the sanctioning authority and for granting No Objection Certificates by the internal/ external agencies such as Delhi Fire Services, Delhi Urban Art Commission, Airports Authority of India, Delhi Pollution Control Committee, Heritage Conservation Committee, Department of Forest, Department of Labour, Delhi Jal Board, National Monuments Authority, Chief Inspector of Factories, Director General of Explosives, etc., shall be provided in CAF/COCCRF, as applicable.

(b) Any undertaking/ declaration required by the sanctioning authority or any other agency, shall be part of CAF/COCCRF, as applicable.

**2.0.3** **Bulk characteristics for Development:** Bulk characteristics for development on any specific plot can be determined by the owner/ concerned professional(s) by referring to the Master Plan for Delhi, Zonal Development Plan, layout plan, land records such as lease deed/ conveyance deed, allotment/ auction conditions, control drawings, other applicable guidelines, etc. The sanctioning authority shall ensure that the Master Plan for Delhi, Zonal Development Plans, approved layout plans, other applicable guidelines are made available free of cost in the public domain on their websites.

**2.0.4** The plans/ drawings to be submitted at various stages of the process to the sanctioning authority shall adhere to the following requirements:

(a) **Key Plan:** Layout/ site plans shall include a key plan drawn to a scale of not less than 1:10,000 showing boundary and location of the site with respect to neighboring landmarks including North Point.

(b) **Size of Drawing Sheets:** Size of drawing sheets shall be any of those specified in table 2.1 below:

**Table 2.1: Standard Sizes of Drawings**

| S.No | Designation | Trimmed size, mm |
|---|---|---|
| 1 | A0 | 841x1189 |
| 2 | A1 | 594x841 |
| 3 | A2 | 420x594 |
| 4 | A3 | 297x420 |
| 5 | A4 | 210x297 |
| 6 | A5 | 148x210 |

(c) All dimensions in drawings shall be indicated in metric unit.

(d) **Recommended notation for colouring of plans:** The site and building plans shall be coloured as specified in the table 2.2 given below. The colouring notation used for items, which are not listed in table 2.2, shall be indexed:

**Table 2.2: Colouring of Plans**

| S. No. | Item | Site Plan | Building Plan |
|---|---|---|---|
| 1. | Plot lines | Thick green | Thick green |
| 2. | Existing street | Green | Black Line |
| 3. | Permissible building line | Thick dotted green | Black dash dot |
| 4. | Existing work (Outline) | Green | Green |
| 5. | Work proposed to be demolished | Yellow hatched | Yellow hatched |
| 6 | Proposed--<br><br>a) Additions/ Alterations.<br><br>b) Entirely new work | Red<br><br>Not to be coloured | Red<br><br>Not to be coloured |
| 7. | Drainage | Red dotted | Red dotted |
| 8. | Water Supply | Blue dotted thin | Blue dotted thin |

(e) **Scales for Layout/ Site/ Landscape Plans:**

(i) Layout plan prepared by the developer shall be in the scale of 1:10,000.

(ii) Site Plan shall be drawn to a scale as follows:

| Site area | Scale (Preferable or readable scale) |
|---|---|
| Up to 1000 sqm | Not less than 1:200 |
| More than 1000 sqm and up to 10,000 sqm | Not less than 1:500 |

(iii) Landscape Plan shall be readable, preferably on a scale of 1:500, indicating circulation, parking spaces, pathways, lawns, trees, shrubs, ground cover and climbers.

**(f) Details to be shown in Site Plan**

(i) The site should be a part of an approved layout plan. However, if there is no approved layout plan, the site will be governed by provisions of MPD/ ZDP. The site plan should be a detailed plan showing the proposed placement of structure/ building, parking area, open area, landscaping, and other development features as required by the specific sections of the Development Control Regulations of Master Plan for Delhi (MPD). The site plan shall also indicate boundaries, means of access, position of the site in relation to neighboring street(s), name(s) of these street(s), and width of the street in front of the site.

(ii) Further, the site plan shall show the direction of North point, existing physical features such as wells, drains, trees, etc., ground area of the site, the breakup of covered area (existing and proposed) on each floor (with the percentage of total plot area required under MPD governing the coverage of the area), number of floors, height, basement area, setback lines.

**(g) Service Plans:** Service plans shall include the following:

(i) Service plans for water supply, sewage disposal system and storm water disposal, wherever applicable, shall be as per the prescribed norms and standards of the sanctioning authority.

(ii) Service plans of building services such as plumbing, HVAC, installation of electrical fittings, etc., as per NBC norms and standards. are to be shown on the same scale as that of the building plan.

**(h) Building Plans:** The plans, elevations and sections of the buildings, shall be drawn to a readable scale or preferably to the scale of 1:50 for plots measuring up to 250 sqm. For plots measuring above 250 sqm to 500 sqm, these shall be drawn at the scale of 1:100. For plots measuring above 500 sqm, these shall be drawn at the scale of 1:200. If the drawings do not fit in the paper sizes listed in table 2.1, then suitable scale as per the proper size in the multiple of 100 can be adopted.

**(i) Details to be shown on Plans:** The plans shall include floor plans of all floors together with the covered area, clearly indicating the location and sizes of all components like rooms, staircases, ramps, exit ways, lift wells, etc. and indicating the use or occupancy of all parts of the building.

**(ii) Details to be shown in Sections:** The sections shall indicate the total height of buildings, rooms and the height of the parapet. At least one section should be taken through the staircase, kitchen, toilet, bath and W.C. and lift.

**(iii) Details to be shown for all Elevations:** Façade with total height of buildings, permissible projections beyond the permissible building line, location of doors, windows and other openings including ventilators with size in a schedule form.

**(i) Signing of Plans**

(i) Signing of Building plans: The building plans/drawings shall be digitally signed by the owner(s), the structural engineer and one of the following professionals, as per their competence indicated against them:

a. Architect (in case of any plot size)

b. Engineer (in case of plots up to 500 sq. m)

c. Supervisor (in case of plot up to 200sqm)

Note: Qualification and Competence of various professionals shall be as per Annexure-I.

(ii) Signing of Layout/ Site Plans: All Layout/ Site Plans shall be signed by the owner(s) and one of the following professionals, as per their competence indicated against them:

a. Town Planner (in case of any plot size)

b. Architect (in case of plots up to one hectare in size)

Note: Qualification and Competence of various professionals shall be as per Annexure-I.

(iii) Signing of Landscape Plan: Landscape Plan shall be signed by the owner(s) and one of the following professionals, as per their competence indicated against them:

a. Landscape Architect (in case of any plot size)

b. Architect (in case of plots up to two hectare in size)

Note: Qualification and Competence of various professionals shall be as per Annexure-I.

(iv) Signing of Service Plans: Service Plans shall be signed by the owner(s) and one of the following professionals:

a. Engineer for Utility Services; or

b. Architect

Note: Qualification and Competence of various professionals shall be as per Annexure-I.

**(j) Requirement of Site**

(i) Damp Site: Wherever the dampness of a site or the nature of the soil renders such precautions necessary, the ground surface of the site between the walls of any building erected thereon shall be rendered damp-proof to the satisfaction of the sanctioning authority.

(ii) Corner Site: Where the site abuts two streets, the frontage would be on the street having the larger width. In cases, where the two streets are of same width, then the larger depth of the site will decide the frontage and open spaces. In such case the location of a garage (on a corner plot) if provided within the open spaces shall be located diagonally opposite the point of intersection. However, the details of the frontage of the building should be as per the approved layout plan.

(iii) Minimum Size of Site: The minimum size of sites for the construction of different types of building or different use groups shall be mainly in accordance with provisions of the MPD and any land development Rules and Regulations of the sanctioning authority.

(iv) Means of Access: Every building/ plot shall abut on a public/ private means of access like streets/roads duly formed. In case of approved layout plan, the means of access shall be in accordance with provision of MPD.

(v) Distance from Electric Lines: No verandah, balcony, or the like shall be allowed to be erected or any additions or alterations made to a building within the space between the building and overhead electric supply line in accordance

with the Indian Electricity Rules (National Electric Code 2011, Clause 3.2) and its amendments from time to time The distances provided in NBC (Part III) are indicated in the table below:

| | Vertically (m) | Horizontally (m) |
|---|---|---|
| a) Low and medium voltage lines and service lines. | 2.5 | 1.2 |
| b)High voltage lines up to and including 11 KV | 3.7 | 1.2 |
| c)High voltage lines above 11 KV to and including 33KV | 3.7 | 2.0 |
| d) Extra high voltage lines beyond 33KV. | 3.7(add 0.3 m for every extra 33KV or part thereof) | 2.0(add 0.3 m for every extra 33KVor part thereof). |

(k) Buildings shall be designed as per provisions specified in Chapters 7 to 13 of these bye-laws.

2.0.5 All communications/ intimations between owner/ applicant, sanctioning authority and any other statutory body shall be done by electronic means which includes online forms provided for such purpose, e-mails, information updated on online portals, etc.

**2.1 Notice for obtaining sanction of building plan:**

Every person who intends to erect, re-erect or make additions/ alterations in any place in a building or demolish any building shall give notice to the sanctioning authority of his/her said intention in the prescribed CAF, which shall be accompanied by the following plans, statements and documents:

**2.1.1 Plans and Drawings**

a) Site Plan: Site plan, as per the details, specifications and signatures specified in bye-law 2.0.4, shall be submitted.

b) **Layout Plan:** For plots of area one hectare and above, layout plan/ revised layout plan prepared by the Architect/ Developer/Applicant shall be submitted. Layout Plan duly approved by the Competent Authority shall be submitted by the Architect/Developer/Applicant, along with building plan application, in case the authority to approve the layout plan is different from the authority to sanction the building plans. Layout plan submitted by the Architect/ Developer/Applicant shall be prepared and signed as per the details specified in bye-law 2.0.4.

c) Landscape Plan: Landscape plan shall be submitted for all proposals which require Delhi Urban Art Commission's approval as per their guidelines. Landscape plans shall be prepared and signed as per the details specified in bye-law 2.0.4.

d) Service Plans: Service plans, prepared and signed as per the details specified in bye-law 2.0.4, shall be submitted.

e) Building Plans: Building plans, as per the details, specifications and signatures specified in bye-law 2.0.4, shall be submitted.

f) The Architect, while submitting building plan application, shall inspect the site and ensure that the building plans submitted are as per existing site conditions including existing construction, if any.

**2.1.2 Ownership Documents**

(a) Document(s) to establish the ownership of property such as Sale deed/ Lease deed/ Perpetual lease deed/ Conveyance deed/ Relinquishment deed/ Gift deed or any other legal documents.

(b) In case of leasehold property, lease deed along with extension of time for construction up to the date of application has to be submitted. In case lease deed has not been executed, NOC from the lessor has to be submitted.

(c) In case of Government Buildings, an undertaking from the Competent Authority of the concerned Government Department shall be sufficient.

**2.1.3 Signing of CAF and Declarations:**

CAF shall be signed by the owner, architect and other professionals, as applicable. The following declarations/ certificates shall be part of CAF:

Appointment of professionals such as architect, engineer, structural engineer, supervisor, landscape architect, town planner, etc., whichever are applicable along with valid registration/ qualification certificate of the professional(s). {Whenever there is a change in the appointed professional(s), an intimation to this effect shall be along with valid registration/ qualification certificate of the professional(s)}. The CAF shall also include Structural Safety Certificate, Certificate for Supervision-No Nuisance and Debris Removal, Indemnity for Basement.

Note: i) The requirement of submission of Notice of Commencement of Work to the concerned office/s of Sanctioning Authority has been done away with, in these Building bye-laws.

ii) Information on Tentative Date of Commencement and Completion should be provided while applying in CAF, and the same shall be forwarded Online to the Labour Department.

**2.1.4 Soil Testing Report from Geo-Technical Engineer**

In case of high risk buildings, a Soil Testing Report from Geo-Technical Engineer, having qualification and competence as per Annexure-I, shall be submitted. Structural drawings shall be prepared by taking this report into account.

**2.2 Fees and Charges**

2.2.1 All fees and charges related to building permit for sanction/ revised sanction/ completion/ revalidation/ regularization and plinth level inspection shall be as per Annexure III and the charges related to compoundable deviations shall be as per Annexure IV.

2.2.2 No notice for building permit submitted to the Authority/sanctioning authority shall be deemed valid unless and until the requisite building permit fee has been deposited to the concerned sanctioning authority. The fee for plinth level inspection shall be deposited along with the submission of application for sanction of building plan.

2.2.3 The sanctioning authority shall prepare an automated calculator for all the fees and charges including building permit fee, betterment levy, additional FAR and other charges, and place it on their website in public domain for calculating the fee. The calculator shall be integrated with online system of submission of application for building permit.

2.2.4 In case any fees & charges are required by any external agencies for issuing NOC, such fees & charges shall be deposited electronically while submitting CAF or COCCRF on the website of the sanctioning authority and/ or through the given link in the CAF or COCCRF. The sanctioning authority shall transfer such receipts to the concerned agency electronically.

## 2.3 Grant of Sanction of Building Plan or Refusal

2.3.1 Application for sanction of building plan shall be submitted to the sanctioning authority. The sanctioning authority may either grant or refuse the sanction or may sanction them with modifications or directions as it may deem necessary and thereupon shall communicate its decision to the owner/ applicant within the time limit stipulated in Chapter 3 for various categories of buildings specified therein or within 30 days of receipt of application, whichever is less, digitally signed as per proforma given in Form B-1.

2.3.2 Sanction of building plan includes new case of sanction, revised sanction, sanction of addition/ alteration and shall be governed by prevailing norms at the time of application.

2.3.3 Approval/ NOC from external agencies

(a) In cases, where the building plan requires approval/ NOC from agencies outside the sanctioning authority such as Delhi Fire Services, Delhi Urban Art Commission, Airports Authority of India, Delhi Pollution Control Committee, Heritage Conservation Committee, Department of Forest, Department of Labour, National Monuments Authority, Chief Inspector of Factories, Director General of Explosives, etc., the sanctioning authority shall issue the building permit only after getting such approval/ NOC from the concerned agency.

(b) The approval/NOC/refusal shall be issued by the outside agency within 15 days or within the time stipulated in Chapter 3, whichever is less; failing which the approval/NOC of the outside agency on the building plan shall be deemed to be issued. The sanctioning authority shall process the application for building permit accordingly.

(c) All such external agencies shall prepare Colour Coded Zonal Maps (CCZM) with information on the specific area where their approval/ NOC is required. These agencies shall place these maps on their website and also on the websites of the sanctioning authority directly or through a link.

Example: DMRC grants NOC only to such buildings which fall within 11 m from the boundary of their operational area. DMRC shall make a colour-coded zonal map of their regulated area available on their website directly and through a link on the websites of all sanctioning authority.

(d) These external bodies shall prepare a Standard Operating Procedure (SOP) explaining all the details regarding the areas for which their approval/ NOC is required, the requirements to be met for such approval/ NOC, the procedure to be followed by the person(s) applying for the sanction of the building plan and how such person(s) can find whether a building lies within the agency's area of regulations or not. These agencies shall place the SOP on their website and also on the website of sanctioning authority directly or through a link. The SOP shall be simple and clear with illustration(s).

Note: For applicability of Environmental Conditions, See 3.2.

**2.3.4 Deemed Sanction:**

(a) If the sanctioning authority fails to intimate the owner/ applicant, of its refusal or sanction or any intimation, within the time limit stipulated in bye-law 2.3.1, the building plan shall be deemed to have been sanctioned. However, the deemed sanctioned building plan shall be released only after the owner/ applicant informs the sanctioning authority about the deposit of requisite fees and charges, as applicable.

(b) Deemed Sanction shall not be construed to authorize any person to do anything in contravention or against the terms of lease or titles of the land or against MPD, any regulations, bye-laws, ordinance, etc.

2.3.5 In case the owner/ applicant fails to remove all the shortcomings communicated by the sanctioning authority, within 15 days from the date of receipt of such communication, the application shall be rejected and the building permit fees shall be forfeited. The same shall be conveyed to the owner/ applicant accordingly.

2.3.6 In case of any intimation of shortcomings made by the sanctioning authority/ statutory body to the owner for compliance; the time period for sanction of building plan for various categories of buildings, as specified in bye-law 2.3.1, shall be counted from the date of the receipt of the last communication/ submission made by the owner/ applicant.

2.3.7 In case the sanctioning authority rejects the application, the applicant can resubmit the application for sanction of building plan along with the building permit fees again.

**2.4 Validity of Building Permit**

2.4.1 The building permit shall remain valid for five years from the date of its issue subject to the condition that construction work at site shall start within one year from the date of sanction of building plan.

2.4.2 No building activity can be carried out after the expiry of validity of building permit.

2.4.3 Application for occupancy-cum-completion certificate shall not be entertained if it is submitted on a date later than either of the following:

(i) thirty days after the expiry of the validity period of building permit; or

(ii) the expiry of extension of time for construction in case of leasehold properties.

2.4.4 Procedure for Revalidation of Building Permit

(a) The building permit can be revalidated for a period in multiples of year not exceeding 5 years at a time, from the date of expiry of the validity of the original permit on payment of building permit fees for revalidation (as per Annexure III). Application for such revalidation shall be submitted along with the following documents:

a. In case of change of ownership or expiry of time for construction in case of leasehold properties, ownership documents for updated ownership as prescribed in bye-law 2.1.2.

(b) The application for revalidation shall be processed and revalidation or objection, if any, shall be communicated within period stipulated in Chapter 3 or 30 days from the date of the application, whichever is less.

**2.5 Procedure During Construction**

2.5.1 **Availability of information at construction site:** The owner/ construction company/ contractor shall ensure that a copy of sanctioned building plan is available at any time at the construction site during the construction of the building. Such copies shall be made available to authorized officers of the sanctioning authority and other statutory bodies for carrying out their duties/functions, if required.

2.5.1.1 **Inspection at the time of Sanction:** The first inspection by the Sanctioning Authority shall be conducted for Plinth Level as per sub-clause 2.5.2 and final inspection shall be conducted for OCC as per sub-clause 2.7.5. The responsibility of construction/deviation from plinth level to the OCC shall rest with the Architect/Engineer/ Supervisor/Structural Engineer as per the competency and the owner.

(In UBBL 2016, notified on 22.03.2016, the inspection of the Sanctioning Authority for sanction of building plan of all type of buildings had been done away with).

2.5.2 P**linth level inspection:** The inspection of construction up to plinth level shall be carried out by qualified professionals/ sanctioning authority as per the competence matrix given in Table 2.3 based on for the risk category of buildings.

**Table 2.3: Competence Matrix for Plinth Level Inspection**

| | Risk Category | | | |
|---|---|---|---|---|
| | Very low | Low | Moderate | High |
| Competence | Architect/ Engineer/ Supervisor | | Sanctioning authority | |

*Refer Chapter 3 for Risk Category*

2.5.3 Procedure for plinth level inspection forvery low and low risk buildings: In case of Very Low and Low risk buildings, the architect/ engineer/ supervisor shall conduct plinth level inspection and shall submit the Inspection Report, in Form C-2, to the sanctioning authority.

2.5.4 **Procedure for plinth level inspection for moderate and high risk buildings:**

(a) **Intimation of completion of the work up to plinth level for moderate and high risk buildings:** In case of Moderate and High risk buildings, on completion of work up to plinth level, the owner, through his architect/ engineer/ supervisor, shall submit an intimation of such completion, in Form C-1, to the sanctioning authority to enable the sanctioning authority to inspect that the work conforms to the sanctioned building plans and building bye-laws. The following documents shall be submitted along with the intimation:

a. Building plans indicating the plinth constructed at site in relation to the plot dimensions, area and setbacks, duly signed.

b. Photograph(s) showing construction up to plinth level at site.

(b) Time limit for plinth level inspection: The sanctioning authority shall prepare plinth level inspection report, in Form C-2, and inform the same along with the observed deviation(s)/ objection(s), if any, to the owner and the professional who submitted the intimation as per bye-law 2.5.4(a), within 7 days from the receipt of such intimation.

(c) Deemed completion of plinth level inspection: In case the owner/ applicant who submitted the intimation as per bye-law 2.5.4(a), receives no communication from the sanctioning authority within 7 days of such intimation, plinth level inspection will be deemed to have been completed without any deviation having been noticed. It will be the responsibility of the owner/ architect/ engineer/ supervisor to ensure that the building is constructed in accordance with the sanctioned building plan, provisions of MPD and these building bye-laws.

2.5.5 No further construction can be carried out without the submission/ issue of plinth level inspection report free from any deviation or deemed completion of plinth level inspection. Violation of this provision will attract penalty at same rate as that for building permit fee for sanction of building plan.

## 2.6 Notice for obtaining OCC:

The owner/ applicant shall submit the notice for obtaining OCC or part OCC in COCCRF along with the following documents and plans:

**2.6.1 Plans and Drawings**

(a) Site Plan: Site plan as built on site shall be submitted.

(b) Layout Plan: For plots of area one hectare and above, layout plan/ revised layout plan prepared by the developer, as executed on site, shall be submitted. The layout plan prepared by the developer shall be in the scale of 1:10,000.

(c) Landscape Plan: Landscape plan, as executed on site, shall be submitted for all proposals which require Delhi Urban Art Commission's approval as per their guidelines. Landscape Plan shall be readable, preferably on a scale of 1:500, indicating circulation, parking spaces, pathways, lawns, trees, shrubs, ground cover and climbers.

(d) Service Plans: Service plans, prepared and signed as per the details specified in bye-law 2.0.4 as executed on site, shall be submitted.

(e) Building Plans: Building plans, as executed on site, as per the details, specifications and signatures specified in bye-law 2.0.4, shall be submitted.

**2.6.2 Ownership Documents**

Ownership documents have to be submitted only in case of change of ownership since the sanction of building plan, as follows:

(a) Document(s) to establish the ownership of property such as Sale deed/ Lease deed/ Perpetual lease deed/ Conveyance deed/ Relinquishment deed/ Gift deed or any other legal documents.

(b) In case of leasehold property, lease deed along with extension of time for construction up to the date of application has to be submitted. In case lease deed has not been executed, NOC from the lessor has to be submitted.

(c) In case of Government Buildings, an undertaking from the Competent Authority of the concerned Government Department shall be sufficient.

**2.6.3 Lift Manufacturer's Certificate**

Lift Manufacture's certificate shall be submitted to ensure compliance with prescribed standards.

**2.6.4 Photographs of the building**

Minimum three photographs of the building taken from different angles so as to show the overall view of the building.

**2.6.5 Signing of COCCRF and Declarations:**

COCCRF shall be signed by the owner, architect and other professionals, as applicable. COCCRF shall include Structural Safety Certificate as given in the Declaration Proforma.

**2.7 Grant or Refusal of OCC:**

2.7.1 Application for issue of OCC shall be submitted to the sanctioning authority. The sanctioning authority may either grant or refuse the OCC and thereupon shall communicate its decision to the person giving the notice within the time limit stipulated in Chapter 3 for various categories of buildings specified therein or within 30 days of receipt of application, whichever is less, digitally signed as per proforma given in Form D-1.

2.7.2 No person shall occupy or allow any other person to occupy any building or part thereof for any purpose until such building or part of a building has been granted the OCC. The following items need to be mandatory for issuance of OCC.

(i) Flooring of any type.

(ii) Electrical wiring. However, electrical fitting shall not be mandatory

(iii) Plumbing and fitting in at least one toilet and kitchen.

(iv) Name and number plate.

(v) For internal and external finishing of walls or plastering shall not be mandatory.

(vi) Building shall be lockable, i.e. all external door and windows have to be provided. In case grill is provided in the windows then fixing of glass in the window panes shall not be mandatory.

2.7.3 **Part OCC:** Part OCC can be issued for at least one block complete in all respects (refer 2.7.2) from Ground to Terrace floor (including stilt & basement, if constructed) with all the due approvals from the external agencies, as and when applicable. However, issue of part OCC will not affect the validity of the building permit. After expiry of validity period, the building permit will have to be revalidated irrespective of whether part OCC has been issued or not.

2.7.4 A**pproval/ NOC from external agencies**

(a) In cases, where the issue of OCC requires approval/ NOC from agencies outside the sanctioning authority such as Delhi Fire Services, Delhi Urban Art Commission, Delhi Jal Board, Heritage Conservation Committee, etc., the sanctioning authority shall issue the OCC only after getting such approval/ NOC from the concerned agency.

(b) The approval/ NOC/ refusal shall be issued by the outside agency within 15 days of receipt of the application or within the time stipulated in Chapter 3, whichever is less; failing which the approval/ NOC of the outside agency on the building plan shall be deemed to be issued. The sanctioning authority shall process the application for OCC accordingly.

2.7.5 I**nspection for OCC:**

The sanctioning authority, on receipt of the notice in COCCRF along with mandatory documents, shall conduct inspection of the building/ work after communicating the schedule of inspection to the owner. The inspection for OCC shall be carried out by qualified professionals/ statutory bodies as per the competence matrix given in Table 2.4 based on for the risk category of buildings.

**Table 2.4: Competence Matrix for Inspection for Occupancy-cum-Completion Certificate:**

| | Risk Category | | | |
|---|---|---|---|---|
| | Very low | Low | Moderate | High |
| Competence | Architect/ Engineer/ Supervisor | | Sanctioning authority/ Statutory Bodies. | |

2.7.6 **Procedure for inspection for OCC for very low and low risk buildings:** In case of very low and low risk buildings, the architect/ engineer/ supervisor shall conduct inspection for OCC and shall submit the inspection report to the sanctioning authority.

2.7.7 **Procedure for inspection for OCC for moderate and high risk buildings:**

(a) All the external agencies shall inspect the site/ buildings and communicate to the sanctioning authority and the owner/ applicant, their NOC/refusal/objection within a period of 15 days from the date of the receipt of the COCCRF.

(b) The sanctioning authority shall conduct inspection of the site, and intimate the objection, if any, to the owner/ applicant within 7 days of receipt of NOC from external agencies. In case there are no objections, compounding fee, to be calculated for compoundable items given in Annexure IV, shall be intimated to the owner/ applicant within 7 days of receipt of NOC from external agencies.

2.7.8 On compliance of all requirements and submission of all fees and charges, OCC shall be issued as per proforma given in Form D-1, within the period stipulated in bye-law 2.7.1.

2.7.9 In case of refusal of OCC, communication, giving full reasons, shall be conveyed as per the proforma given in Form D-2, within the period stipulated in bye-law 2.7.1.

2.7.10 **Deemed OCC:**

(a) If the sanctioning authority fails to intimate the owner/ applicant, of its refusal or approval or any intimation, within the time limit stipulated in bye-law 2.7.1, OCC shall be deemed to have been issued. However, the deemed OCC shall be released only after the owner/ applicant informs the sanctioning authority about the deposit of requisite fees and charges, as applicable.

(b) Deemed OCC shall not be construed to authorize any person to do anything in contravention or against the terms of lease or titles of the land or against MPD, any regulations, bye-laws, ordinance, etc.

2.7.11 In case the owner/ applicant fails to remove all the shortcomings communicated by the sanctioning Authority, within 15 days from the date of receipt of such communication, the application shall be rejected and the building permit fees shall be forfeited. The same shall be conveyed to the owner/ applicant accordingly in Form D-2.

2.7.12 In case of any intimation of shortcomings made by the sanctioning authority/statutory body to the owner for compliance; the time period for issue of OCC for various categories of buildings, as specified in bye-law 2.7.1, shall be counted from the date of the receipt of the last communication/ submission made by the owner/ applicant.

2.7.13 In case the sanctioning authority rejects the application, the applicant can resubmit the application for issue of OCC along with the building permit fees.

## 2.8 Regularisation

Any building or part thereof constructed unauthorisedly with or without obtaining the sanction of building plan and/or OCC, can be regularised, if the same is within the ambit of BBL and MPD provisions by paying requisite fees and charges as per Annexure III & Annexure IV, as per Form D-3.

## 2.9 Penal Action

### 2.9.1 Revocation of Building Permit

The sanctioning authority shall revoke any building permit including sanction of building plan and/or OCC and take action as per law, if there has been any false statement or any misrepresentation of material facts in the application on which the building permit was based.

### 2.9.2 Unauthorized Construction

In case of unauthorised development, beyond the permissible/ compoundable limits of these bye-laws and provisions of MPD, the sanctioning authority shall take suitable action, which may include demolition of unauthorized works,

sealing of premises, prosecution and criminal proceeding against the offender in pursuance of relevant laws in force. The demolition shall be at the risk and cost of the owner.

2.9.3 **Action against the Owner/ Professional:**

a. If the sanctioning authority notices that any owner/ professional(s) has made false statement(s) or concealed material facts and misrepresented for obtaining building permit in contravention of the extant laws/ bye-laws/ rules & regulations, the sanctioning authority shall

(i) delist the professional(s) from all the sanctioning authorities in Delhi for a specified time period;

(ii) the building permit shall be revoked;

(iii) details of all the delisted professional(s) and the time frame for which they have been delisted shall be prominently displayed on the website of all the sanctioning authorities; and

(iv) action shall be taken against the owner/ allottee/ occupier by the sanctioning authority in accordance with the extant laws/ bye-laws/ rules & regulations.

b. In case of architect(s), sanctioning authority shall inform the Council of Architecture (COA) regarding the act of the defaulting architect(s) for taking suitable action for professional misconduct.

2.10 **Latent Defects Liability:**

a) The following shall be held liable for any structural flaws or defects in all risk category of buildings having plot area 750 sqm. and above, after it is in use:

i. Architect.

ii. Structural Engineer.

iii. Site Supervisor/ Site Engineer.

iv. Developer/Landowner/ Construction Company including contractor / sub-contractor.

b) The above mentioned professionals and the Developer/Landowner/ construction company including contractor/ sub-contractor shall take decennial professional liability insurance to cover for such liability, subject to such guidelines as may be prescribed from time to time.

**2.11 Construction to be in conformity with building bye-laws.**

**Owners' liability:** Neither granting of permission nor approval of the buildings and specifications, nor the inspection by the sanctioning authority during erection of the building, shall in any way relieve the owner of such building from full responsibility for carrying out the work in accordance with the building bye-laws and in case of any violation, the owner shall be liable for action under the extant law.

# Chapter 3

## Risk Based Classification and Environmental Conditions for Streamlining Building Plan Approvals

### Background

In order to attract investments into the country, efforts are being made to improve 'Ease of Doing Business'. In this direction, the limit of Built-up Area (BUA) for Foreign Direct Investment (FDI) has been reduced from 50,000 sqm to 20,000 sqm. The local bodies have been directed to get the entire building approval process made online so that the building plan applications are submitted online, building fees and other charges are deposited online, and after due scrutiny, the approvals are conveyed online. Further, certain external bodies like Delhi Urban Art Commission (DUAC), National Monuments Authority (NMA), Airports Authority of India (AAI), Delhi Fire Services (DFS), Delhi Metro Rail Corporation (DMRC), Heritage Conservation Committee (HCC), etc. grant No Objection Certificate (NOC)/ approvals on the proposed building plans to the local bodies. Such external bodies have been directed to prepare online NOC system which is compatible and integrated with that of the local bodies and the desired information is sent to the concerned external bodies and their comments/ NOC/ approval are received online so that there is no need for building proponents to pursue matter with local bodies or external agencies. The specific requirements of the external bodies are to be added in the Common Application Form (CAF) of the local body so that building proponent has to file all information at one go only. The objective is to make the whole process simplified and streamlined to ensure ease in getting the approvals for building permit within stipulated time.

#### Risk Based Classification of Buildings for Fast Tracking the Approval Process

Further, a procedure has been laid down in Chapter-4 of the Building Bye-Laws for sanction of building plans of small residential plots measuring up to 105 sqm named as SARAL Scheme. The idea is to facilitate building proponents of such small sized plots to get their building plans prepared by an architect/ engineer (qualification and competence as per Annexure I), and submit to the concerned local bodies along with fees, other charges, drawings and documents before commencement of the construction and the submission itself shall be deemed sanction. Hence, such persons may not have to wait for processes in the local bodies to initiate construction.

However, there is a need to make provisions for fast-tracking the building permission procedure for bigger plots as well. Therefore, in the spirit of 'Ease of Doing Business', the buildings have been classified on the basis of risk parameters/ risk based classification to clear the building permits on fast track system. This also helps in fast-tracking of inspection and issuance of OCC. This kind of classification is used for fast tracking the sanction of building plans, which facilitates ease of doing business environment for construction permits, that will improve the rating of the country in World Bank's assessment in 'Ease of Doing Business'. The matter was discussed with all amongst MCDs, DDA, NDMC, DUAC, Delhi Fire Services and TCPO in different meetings. Considering all aspects related to the approvals and the objective of 'Ease of Doing Business', the bye-laws on risk-based classification and fast-tracking the sanctioning procedure were framed based on the consensus that emerged in these meetings for certain residential buildings, storage buildings/ warehouses/ godowns and government buildings.

Further, DDA, in consultation with local bodies, has done risk based classification for the approval of all other types of buildings as well for fast tracking approval system.

**Requirement of Climate Resilient Construction: Integration of Environmental Clearance conditions with Building Permission.**

Land, Air, Noise, Water, Energy, Biological/ Socio-Economic factors, Solid/ other waste management are the main facets considered in relation to Pre, During and Post Building Construction for Sustainable Environment Management. Therefore, it is necessary for the building construction process to ensure compliance to various conditions laid down by the Ministry of Environment, Forest & Climate Change (MoEF&CC).

The building construction sector is one of the major contributors towards carbon footprints which affect climate change. India is committed towards mitigating the effects of climate change and moving towards internationally accepted norms for environment friendly building construction. Currently, this objective of environmental safeguard is achieved through obtaining Environment Clearance (EC) for any construction project having built up area (BUA) more than 20,000 sqm from the State Environment Impact Assessment Authority (SEIAA) designated by MoEF&CC for the States/UTs. This is administered under notification of MoEF&CC.

With rapid urbanisation and growth of Indian economy, it is anticipated that the construction activities will experience a rapid growth. Government is committed towards streamlining the clearances for buildings and real estate sector and empowering the urban local bodies with an objective of 'Ease of Doing Business'.

MoEF&CC, vide its notification no. S.O. 3999(E) dated 09.12.2016, has amended the Environment Impact Assessment Notification, 2006 to insert a paragraph (numbered 14) regarding "Integration of environmental condition in building bye-laws", which will integrate the environmental safeguards into building plan approval process and empower the concerned local body to examine, stipulate and ensure compliance of the environmental requirements in their respective areas. The environmental conditions required to be met by the buildings have been classified in the following 3 categories based on the total BUA of the building:

i. **Category '1'** buildings: BUA from 5,000 sqm to less than 20,000 sqm

ii. **Category '2'** buildings: BUA from 20,000 sqm to less than 50,000 sqm

iii. **Category '3'** buildings: BUA from 50,000 sqm to less than 1,50,000 sqm

The local body or any other body authorized to sanction building plans, shall approve the building plans by ensuring that stipulated conditions for the respective categories of buildings are met. No separate Environment Clearance (EC) will be required in these cases.

Before notification of these building bye-laws, a copy of this chapter was sent to MoEF&CC for seeking their concurrence at the draft stage so as to ensure compliance with the necessary requirements for environment clearance. After getting the concurrence, this chapter has been included in the bye-laws. After notification of these bye-laws as per due process of law, a copy of this chapter shall be sent again to MoEF&CC to get notification orders issued by that Ministry empowering local bodies of Delhi, which sanction building plans, to approve building plans after ensuring that the required environmental safeguards are met, and there will be no need for seeking Environment Clearance (EC) for buildings with BUA greater than 20,000 sqm and upto 1,50,000 sqm, as was the practice earlier. It will be the responsibility of the concerned local bodies, i.e. building sanctioning authorities, to ensure compliance of the stipulated conditions to address environmental concerns in case of such buildings. For the buildings with BUA more than 1,50,000 sqm, EC shall be obtained as prescribed by MoEF&CC under their notification.

## 3.1 Risk Based Classification for Approval of Building Plans

### 3.1.0 Fast track approval procedure

i. For the buildings classified as Very Low Risk and Low Risk, the fast track procedure for approval of building plans has been specified, wherever applicable, under the bye-laws 3.1.1 onwards.

ii. For buildings classified as Moderate Risk, the time limit for grant/ refusal of sanction of building plan, OCC or revalidation of building permit shall be 20 days.

iii. For buildings classified as High Risk, the time limit for grant/ refusal of sanction of building plan, OCC or revalidation of building permit shall be 30 days.

### 3.1.1 Residential Buildings

3.1.1.1For approval of the residential plotted and group housing buildings, risk based classification shall be as per Table 3.1.

***Table 3.1: Risk Matrix for Residential buildings (Residential Plotted i and Group Housing)***

| Parameter | Risk Category | | | |
|---|---|---|---|---|
| | **Very Low** | **Low** | **Moderate** | **High** |
| Size of the Plot | Up to 105 $m^2$ | Above 105 $m^2$ and up to 500 $m^2$ | Above 500 $m^2$ | Different sizes[ii] |
| Height of building (including stilt, if any) | Below 15 m | Below 15 m | Below 15 m | 15 m and above |
| Use of the premise | Residential Plotted | Residential Plotted (vacant plot) | Residential Plotted | Group Housing |

[i] Residential plotted includes all residential plots forming a part of approved layout/ special areas/ unauthorized regularized colony/ village abadis/ lal dora & extended lal dora resettlement colonies and slum & JJ cluster/ Rehabilitation colonies; excluding those within LBZ.

[ii]Different sizes for Group Housing prescribed in MPD-2021.

3.1.1.2 Fast Track Procedure: The fast track procedure for approval of the residential plotted and group housing buildings, based on their risk based classification as per bye-law 3.1.1.1, shall be as follows:

i. For the buildings categorized as Very Low Risk, the process prescribed in Chapter 4 shall be followed.

ii. For the buildings categorized as Low Risk, an architect/ engineer (qualification and competence as per Annexure-I) shall be empowered to issue the building permit, but only after submitting the plan along with requisite documents and fees to the Sanctioning Authority. If the owner/ architect/ engineer desires to get the building plan sanctioned by the Sanctioning Authority building plans prepared by a qualified architect/ engineer will have to be submitted to the authority/ local body along with the fees and other requisite documents and the Sanctioning Authority shall grant the building permit within 10 days.

### 3.1.2 Storage Buildings/ Warehouses/ Godowns

3.1.2.1 For approval of the buildings meant for use as storage buildings/ warehouses/ godowns, risk based classification shall be as per Table 3.2.

**Table 3.2: Risk Matrix for Storage Buildings/ Warehouses/ Godowns**

| Parameter | Risk Category | | | |
|---|---|---|---|---|
| | Very Low | Low | Moderate | High |
| Covered area on all floors/ Built-Up Area | Up to 250 $m^2$ | Above 250 $m^2$ and up to 2000 $m^2$ | Up to 2000 $m^2$ | Above 2000 $m^2$ |
| Height of building | Below 15 m | Below 15 m | Below 15 m | Below 15 m |
| Abutting Road width | Min. 12 m | Min. 12 m | Min. 12 m | Min. 12 m |
| Type of Material storage (refer **Annexure XIII)** | Category A | Category A | Category B (Stacking height -Medium) | Category B (Stacking height -High) |
| Type of Construction | Type 1 & Type 2 only (as per National Building Code) | | | |

3.1.2.2 The applicant/ owner shall submit an undertaking that he shall not change the approved type of material storage without prior permission from Sanctioning Authority.

3.1.2.3 Fast Track Procedure - For fast-tracking the approval of storage buildings/ warehouses/ godowns, the system shall be as follows:

i. For buildings categorized as Very Low Risk, an architect/ engineer (qualification and competence as per Annexure-I) shall be empowered to issue the building permit, but only after submitting the plan along with requisite documents and fees to the Sanctioning Authority. If the owner/ architect/ engineer desires to get the building plan sanctioned by the Sanctioning Authority, he shall apply online to the local body and the local body shall grant the building permit within 10 days.

ii. For the Buildings classified as Low Risk, building plans will have to be prepared by a qualified architect/ engineer and the building plans will have to be submitted to the Sanctioning Authority along with the fees and other requisite documents. The Sanctioning Authority shall grant the building permit within 20 days.

**3.1.3 Assembly Buildings**

All Assembly buildings shall be classified as High Risk.

**3.1.4 Mercantile/ Commercial Buildings**

For approval of Mercantile/Commercial buildings, buildings with height below 9.0 m. shall be classified as Moderate Risk and buildings with height of 9.0 m and above shall be classified as High Risk.

**3.1.5 Industrial Buildings**

For approval of Industrial buildings, buildings with built-up area less than 250 sq.mtrs. shall be classified as Moderate Risk and buildings with Built up area of 250 sq.mtrs. and above shall be classified as High Risk.

**3.1.6 Institutional Buildings**

3.1.6.1 For approval of Institutional buildings, buildings with height below 9.0 m. shall be classified as Moderate Risk and buildings with height of 9.0 m and above shall be classified as High Risk.

**3.1.7 Business Buildings**

For approval of Business buildings, buildings with height below 15.0 m. shall be classified as Moderate Risk and buildings with height of 15.0 m and above shall be classified as High Risk.

**3.1.8 Hazardous Buildings**

All Hazardous buildings shall be classified as High Risk.

**3.1.9 Educational Buildings**

For approval of Educational buildings, buildings with height below 9.0 m. shall be classified as Moderate Risk and buildings with height of 9.0 m and above shall be classified as High Risk.

**3.1.10 Simplified Procedure for Sanction of Government Building Plan**

A simplified procedure for sanction of government building plans will be followed, which will be on the same lines as given in Annexure XII. However, the Building Plans may also be sanctioned through regular procedure.

**3.2 Environmental conditions for sanctioning Building Plans**

3.2.1 For building plans with a total built-up area (BUA) between 5,000 sqm and 1,50,000 sqm, no separate environment clearance will be required from the Ministry of Environment, Forest and Climate Change (MoEF&CC) for individual buildings. The Sanctioning Authority shall follow the process laid down and adhere to the objective and monitorable environmental conditions as given in MoEF&CCs Notification No. S.O. 3999 (E) dated 09.12.2016 and its appendices, as amended from time to time. Copy of this notification is at Appendix 3.1 of this Chapter.

*Note :i.) "Hon'ble National Green Tribunal vide its Judgement dated 08.12.2017 in OA No.677 of 2016, O.A. No.01 of 2017, O.A. No.7 of 2017, O.A. No.55 of 2017 and O.A. No. 67 of 2017 with respect to the Notification dated 09.12.2016 of MoEF & CC, GOI has inter-alia directed that till the time the Ministry comply with the above directions contained in its aforesaid order and notify the amended provisions of regulations of 2006, it will not implement the impugned Notifications.*

*ii) Hon'ble National Green Tribunal vide its Judgment dated 03.12.2018 in OA No.1017 of 2018, has stayed the impugned notification and directed the existing mechanism, prior to this notification to continue till further orders.*

## Appendix 3.1

**MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE NOTIFICATION**

**New Delhi, the 9th December, 2016**

**S.O. 3999(E).—**Whereas, by notification of the Government of India in the erstwhile Ministry of Environment and Forests number S.O.1533 (E), dated the 14thSeptember, 2006 issued under sub-section (1) read with clause (v) of sub-section (2) of section (3) of the Environment (Protection) Act, 1986 and clause (d) of the sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government directed that on and from the date of its publication, the required construction of new projects or activities or the expansion or modernisation of existing projects or activities listed in the Schedule to the said notification entailing the capacity addition with change in process or technology and or product mix shall be undertaken in any part of India only after prior environmental clearance from the Central Government or as the case may be, by the State Level Environment Impact Assessment Authority, duly constituted by the Central Government under sub-section (3) of section 3 of the said Act, in accordance with the procedure specified therein;

And whereas, the said Ministry has received suggestions for ensuring Ease of Doing Responsible Business; and streamlining the permissions for buildings and construction sector which is important for providing houses and for this purpose the scheme of Housing for all by 2022 with an objective of making available affordable housing to weaker sections in urban area has ambitious target;

And whereas clause (a) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 provides that, whenever the Central Government considers that prohibition or restrictions of any industry or carrying on any processes or operation in any area should be imposed, it shall give notice of its intention to do so;

And whereas, a draft notification for making amendments in the Environment Impact Assessment Notification, 2006 issued in exercise of the powers conferred under sub-section (1) and clause (v) of sub-section (2) of section (3) of the Environment (Protection) Act, 1986 read with clause (d) of the sub-rule (3) of rule 5 of the Environment (Protection)Rules, 1986 was published, vide number S.O.1595 (E) dated the 29thApril 2016, inviting objections and suggestions from all the persons likely to be affected thereby, within a period of sixty days from the date of publication of said notification in the Gazette of India;

And whereas, all objections and suggestions received in response to the above mentioned draft notification have been duly considered by the Central Government;

Now, therefore, in exercise of powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986), read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following further amendments in the Environment Impact Assessment Notification, 2006 namely:-

In the said Notification,-

(I) afterparagraph13,thefollowingparagraphshallbeinserted,namely:-

**"14.Integrationofenvironmentalconditioninbuildingbye-laws.-**

(1) The integrated environmental conditions with the building permission being granted by the local authorities and the construction of buildings as per the size shall adhere to the objectives and monitorable environmental conditions as given at Appendix-XIV.

(2) The States adopting the objectives and monitorable environmental conditions referred to in sub- paragraph (1), in the building bye-laws and relevant State laws and incorporating these conditions in the approvals given for building construction making it legally enforceable shall not require a separate environmental clearance from the Ministry of Environment, Forest and Climate Change for individual buildings.

(3) The States may forward the proposed changes in their bye-laws and rules to the Ministry of Environment, Forest and Climate Change, who in turn will examine the said draft bye-laws and rules and convey the concurrence to the State Governments.

(4) When the State Governments notifies the bye-laws and rules concurred by the Ministry of Environment, Forest and Climate Change, the Central Government may issue an order stating that no separate environmental clearance is required for buildings to be constructed in the States or local authority areas.

(5) The local authorities like Development Authorities, Municipal Corporations, may certify the compliance of the environmental conditions prior to issuance of Completion Certificate, as applicable as per the requirements stipulated for such buildings based on the recommendation of the Environmental Cell constituted in the local authority.

(6) The State Governments where bye-laws or rules are not framed may continue to follow the existing procedure of appraisal for individual projects and grant of Environmental Clearance for buildings and constructions as per the provisions laid down in this notification.

(7) For the purpose of certification regarding incorporation of environmental conditions in buildings, the Ministry of Environment, Forest and Climate Change may empanel through competent agencies, the Qualified Building Environment Auditors (QBEAs) to assess and certify the building projects, as per the requirements of this notification and the procedure for accreditation of Qualified Building Auditors and their role as given at Appendix-XV.

(8) In order to implement the integration of environmental condition in building bye-laws, the State Governments or Local Authorities may constitute the Environment Cell (herein after called as Cell), for compliance and monitoring and to ensure environmental planning within their jurisdiction.

(9) The Cell shall monitor the implementation of the bye-laws and rules framed for Integration of environmental conditions for construction of building and the Cell may also allow the third part auditing process for oversight, if any.

(10) The Cell shall function under the administrative control of the Local Authorities.

(11) The composition and functions of the Cell are given at Appendix-XVI.

(12) The Local Authorities while integrating the environmental concerns in the building bye-laws, as per their size of the project, shall follow the procedure, as given below:

**BUILDINGS CATEGORY '1' (5,000 to < 20,000 Square meters)**

A Self declaration Form to comply with the environmental conditions (Appendix XIV) along with Form 1A and certification by the Qualified Building Environment Auditor to be submitted online by the project proponent besides application for building permission to the local authority along with the specified fee in separate accounts. Thereafter, the local authority may issue the building permission incorporating the environmental conditions in it and allow the project to start based on the self declaration and certification along with the application. After completion of the construction of the building, the project proponent may update Form 1A online based on audit done by the Qualified Building Environment Auditor and shall furnish the revised compliance undertaking to the local authority. Any non-compliance issues in buildings less than 20,000 square meters shall be dealt at the level of local body and the State through existing mechanism.

**OTHER BUILDINGS CATEGORIES (≥ 20,000 Square meters)**

The project proponent may submit online application in Form 1 A alongwith specified fee for environmental appraisal and additional fee for building permission. The fee for environmental appraisal will be deposited in a separate account. The Environment Cell will process the application and present it in the meeting of the Committee headed by the authority competent to give building permission in that local authority. The Committee will appraise the project and stipulate the environmental conditions to be integrated in the building permission. After recommendations of the Committee, the building permission and environmental clearance will be issued in an integrated format by the local authority.

The project proponent shall submit Performance Data and Certificate of Continued Compliance of the project for the environmental conditions parameters applicable after completion of construction from Qualified Building Environment Auditors every five years to the Environment Cell with special focus on the following parameters:-

(a) Energy Use (including all energy sources).

(b) Energy generated on site from onsite Renewable energy sources.

(c) Water use and waste water generated, treated and reused on site.

(d) Waste Segregated and Treated on site.

(e) Tree plantation and maintenance.

After completion of the project, the Cell shall randomly check the projects compliance status including the five years audit report. The State Governments may enact the suitable law for imposing penalties for non-compliances of the environmental conditions and parameters. The Cell shall recommend financial penalty, as applicable under relevant State laws for non-compliance of conditions or parameters to the local authority. On the basis of the recommendation of the Cell, the local authority may impose the penalty under relevant State laws. The cases of false declaration or certification shall be reported to the accreditation body and to the local body for blacklisting of Qualified Building Environment Auditors and financial penalty on the owner and Qualified Building Environment Auditors.

No Consent to Establish and Operate under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 will be required from the State Pollution Control Boards for residential buildings up to 1,50,000 square meters.";

(II) In the Schedule, for item 8 and the entries relating thereto, the following item and entries shall be substituted, namely:-

| (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|
| "8 | | Building / Construction projects / Area Development projects and Townships | | |
| 8 (a) | Building and Construction projects | | >20,000 sq. mtrs and < 1,50,000 sq. mtrs of built up area | The term "built up area" for the purpose of this notification is the built up or covered area on all floors put together including its basement and other service areas, which are proposed in the buildings and construction projects.<br>Note 1. The projects or activities shall not include industrial shed, universities, college, hostel for educational institutions, but such buildings shall ensure sustainable environmental management, solid and liquid and implement environmental conditions given at Appendix-XIV.<br>Note 2.-General Condition shall not apply.<br>Note 3.-The exemptions granted at Note 1 will be available only for industrial shed after integration of environmental norms with building permissions at the level of local authority. |
| 8 (b) | Townships and Area Development projects | ≥ 3,00,000 sq. mtrs of built up area or covering an area ≥ 150 ha | ≥1,50,000 sq. mtrs and < 3,00,000 sq. mtrs built up area or covering an area ≥ 50 ha and < 150 ha | Note.- General Condition shall not apply". |

*[F. No. 19-2/2013-*

*IA-III (Pt.)]MANOJ*

*KUMAR SINGH, Jt.*

*Secy.*

Note: The principal notification was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section(ii) vide number S.O. 1533(E), dated the 14thSeptember, 2006 and subsequently amended vide numbers S.O.1737(E) dated the 11thOctober, 2007, S.O. 3067(E), dated the 1stDecember, 2009, S.O.695(E), dated the 4thApril, 2011, S.O.2896(E), dated the 13thDecember, 2012 , S.O.674(E), dated the 13thMarch, 2013, S.O.2559(E), dated the 22ndAugust, 2013, S.O. 2731(E), dated the 9thSeptember, 2013, S.O. 562(E), dated the 26thFebruary, 2014, S.O.637(E), dated the 28thFebruary, 2014, S.O.1599(E), dated the 25thJune, 2014, S.O. 2601 (E), dated 7thOctober, 2014, S.O. 2600(E) dated 9thOctober, 2014, S.O. 3252(E) dated 22ndDecember, 2014, S.O. 382 (E), dated 3rdFebruary, 2015, and S.O. 811(E), dated 23rdMarch, 2015, S.O. 996 (E) dated 10thApril, 2015, S.O. 1142 (E) dated 17th April, 2015, S.O. 1141 (E) dated 29th April,2015, S.O. 1834(E) dated 6th July, 2015 and S.O. 2572(E) dated 14th September, 2015, S.O. 141(E) dated 15th January, 2016, S.O. 190(E) dated 20th January, 2016, S.O. 648(E) dated 3rd March, 2016 and S.O. 2269(E) dated 1st July, 2016.

## APPENDIX –XIV

## ENVIRONMENTAL CONDITIONS FOR BUILDINGS AND CONSTRUCTIONS

### (CATEGORY '1': 5,000 to less than 20,000 Square meters)

| MEDIUM | S.N. | ENVIRONMENTAL CONDITIONS |
|---|---|---|
| Topography and Natural Drainage | 1 | The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site. No construction is allowed on wetland and water bodies. Check dams, bio- swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. |
| Water Conser vation, Rain Water Harvesting, and Ground Water Recharge | 2 | Use of water efficient appliances shall be promoted. The local bye-law provisions on rain water harvesting should be followed.<br>If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Bye-Laws, 2016.<br>A rain water harvesting plan needs to be designed where the recharge bores (minimum one recharge bore per 5,000 square meters of built up area) is recommended. Storage and reuse of the rain water harvested should be promoted. In areas where ground water recharge is not feasible, the rain water should be harvested andstoredforreuse.Thegroundwatershallnotbewithdrawnwithoutapprovalfrom the Competent Authority. |
| | 2(a) | At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface. |
| Waste Manage ment | 3 | Solid waste: Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste.<br>Sewage: In areas where there is no municipal sewage network, onsite treatment systems should be installed. Natural treatment systems which integrate with the landscape shall be promoted. As far as possible treated effluent should be reused. The excess treated effluent shall be discharged following the CPCB norms.<br>Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organisation (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.id Waste (Management) Rules 2016 and the e-waste (Management) Rules 2016, and the Plastics Waste (Management) Rules 2016 shall be followed. |

| | | |
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| Energy | 4 | Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be Light Emitting Diode (LED).<br>Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.<br>Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.<br>Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design.<br>Wall, window, and roof u-values shall be as per ECBC specifications. |
| Air Quality and Noise | 5 | Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.<br>Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.<br>All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.<br>For indoor air quality the ventilation provisions as per National Building Code of India shall be made. |
| | 5(a) | The location of the DG set and exhaust pipe height shall be as per the provisions of the CPCB norms. |
| Green Cover | 6 | A minimum of 1 tree for every 80 square meters of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. |
| | 6(a) | Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. |

**(Category '2': 20,000 to less than 50,000 Square meters)**

| MEDIUM | S.N. | ENVIRONMENTAL CONDITIONS |
|---|---|---|
| Topography andNatural Drainage | 1 | The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site. No construction is allowed on wetland and water bodies. Check dams, bio- swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.<br>Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done. |
| Water Conser vation, Rain Water Harvesting, and Ground Water Recharge | 2 | A complete plan for rain water harvesting, water efficiency and conservation should be prepared. Use of water efficient appliances should be promoted with low flow fixtures or sensors.<br>The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Bye- laws, 2016.<br>A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority. |
| | 2(a) | At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface. |

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| Waste Manage ment | 3 | Solid waste: Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste.<br>Sewage: Onsite sewage treatment of capacity of treating 100% waste water to be installed. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per CPCB norms. Natural treatment systems shall be promoted.<br>Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organisation (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.<br>The provisions of the Solid Waste (Management) Rules 2016 and the e-waste (Management) Rules 2016, and the Plastics Waste (Management) Rules 2016 shall be followed. |
| | 3(a) | All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers. |
| | 3(b) | Organic waste compost/ Vermiculture pit with a minimum capacity of 0.3 kg/person/day must be installed. |
| Energy | 4 | Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED.<br>Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design.<br>Wall, window, and roof u-values shall be as per ECBC specifications. |
| | 4(a) | Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. |
| | 4(b) | Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible. |
| | 4(c) | Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include flyash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.<br>Fly ash should be used as building material in the construction as per the provisions of the Fly Ash Notification of September, 1999 as amended from time to time. |
| Air Quality and Noise | 5 | Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.<br>Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.<br>All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.<br>All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.<br>For indoor air quality the ventilation provisions as per National Building Code of |

| | | |
|---|---|---|
| | 5(a) | The location of the DG set and exhaust pipe height shall be as per the provisions of the CPCB norms. |
| Green Cover | 6 | A minimum of 1 tree for every 80 sq.mt. of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. |
| | 6(a) | Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. |
| Top Soil preservation and reuse | 7 | Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services.<br>It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site. |
| Transport | 8 | A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks.<br>Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.<br>1. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.<br>2. Traffic calming measures.<br>3. Proper design of entry and exit points.<br>4. Parking norms as per local regulation. |

**(Category '3': 50000 to 150000 m2)**

| MEDIUM | S.N. | ENVIRONMENTAL CONDITIONS |
|---|---|---|
| Topography and Natural Drainage | 1 | The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site. No construction is allowed on wetland and water bodies. Check dams, bio- swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.<br>Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done. |
| Water conservation - Rain Water Harvesting, and Ground Water Recharge | 2 | A complete plan for rain water harvesting, water efficiency and conservation should be prepared. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provisions are not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Bye- laws, 2016.<br>A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.<br>All recharge should be limited to shallow aquifer. |
| | 2(a) | At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface. |
| | 2(b) | Use of water efficient appliances should be promoted. Low flow fixtures or sensors be used to promote water conservation. |
| | 2(c) | Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done. |
| Solid Waste Management | 3 | Solid waste: Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste.<br>The provisions of the Solid Waste (Management) Rules 2016 and the e-waste (Management) Rules 2016, and the Plastics Waste (Management) Rules 2016 shall be followed. |

| | | |
|---|---|---|
| | 3(a) | All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers. |
| | 3(b) | Organic waste composter/Vermiculture pit with a minimum capacity of 0.3 kg/person/day must be installed. |
| Sewage Treatment Plant | 4 | Onsite sewage treatment of capacity of treating 100% waste water to be installed. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per CPCB norms. Natural treatment systems shall be promoted.<br>Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organisation (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013. |
| Energy | 5 | Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.<br>Outdoor and common area lighting shall be LED.<br>Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design.<br>Wall, window, and roof u-values shall be as per ECBC specifications. |
| | 5(a) | Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. |
| | 5(b) | Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible. |
| | 5(c) | Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include flyash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.<br>Fly ash should be used as building material in the construction as per the provisions of the Fly Ash Notification of September, 1999 as amended from time to time. |
| Air Quality and Noise | 6 | Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Wheel washing for the vehicles used be done.<br>Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.<br>Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.<br>All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.<br>All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.<br>For indoor air quality the ventilation provisions as per National Building Code of India. |

| | | |
|---|---|---|
| | 6(a) | The location of the DG set and exhaust pipe height shall be as per the provisions of the CPCB norms. |
| Green Cover | 7 | A minimum of 1 tree for every 80 sq.mt. of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. |
| | 7(a) | Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. |
| Top Soil Preservation and Reuse | 8 | Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site. |
| Transport | 9 | A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks.<br>Road should be designed with due consideration for environment, and safety of users. The road system can be designed with the basic criteria.<br>1. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.<br>2. Traffic calming measures.<br>3. Proper design of entry and exit points.<br>4. Parking norms as per local regulation. |
| Environment Management Plan | 10 | An environmental management plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified in item number 1 to 9 above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure. |

## APPENDIX-XV

### Accreditation of Environmental Auditors (Qualified Building Auditors)

The Ministry of Environment, Forest and Climate Change (MoEFCC), through qualified agencies shall accredit the Qualified Building Environment Auditors (QBEAs). The Qualified Building Environment Auditors could be a firm / organization or an individual expert, who fulfils the requirements. The Ministry will implement this process of accreditation through Quality Council of India (QCI), National Productivity Council or any other organization identified by the Government. The organizations like Indian Green Building Council, Bureau of Energy Efficiency etc. can also be associatedintheprocessofaccreditation,training,andrenewal. TheenvironmentalconsultantsaccreditedbytheQCIfor building sector will be qualified as QBEAs. The QBEAs will meet the following criteria. The accrediting agency can improvise on these criteria.

**Qualifications of the Auditor:**

a. Education: Architect (Degree or Diploma), Town Planners (Degree), Civil Engineer / Mechanical Engineer (Degree or Diploma), PG in Environmental Science or any other qualification as per the scheme of the accreditation.

**Training:**

b. Mandatorytrainingtobegivenbytheaccreditationbodyortheirapprovedtrainingproviders.Thiswill be as per the scheme of the accreditation.

**Experience:**

c. At least 3 years of work experience in the related field or building sector Environment Impact Assessment consultants accredited by QCI or any other experience criteria as per the scheme of the accreditation.

**Infrastructure and equipment:**

d. As per the scheme of the accreditation Renewal:

e. The accreditation will be valid for 5 years and will be renewed as per the process developed under the accreditation scheme.

Accountability/Complaint redressal mechanism: Any complaints regarding the quality of the work of QBEAs shall be made to the accreditation body. The accreditation body shall evaluate the complaint and take appropriate action including black listing or cancellation of the accreditation with wide public notice. This will be in addition to the action at the level of local authority for penalty and blacklisting. The Ministry can also take such action in case of specific complaint or feedback.

**APPENDIX-XVI**

**Environmental Cell at the level of Local Authority:**

An Environmental Cell shall be setup at the local authority level to support compliance and monitoring of environmental conditions in buildings. The Cell shall also provide assistance in environmental planning and capacity building within their jurisdiction. The responsibility of this cell would be monitoring the implementation of this notification and providing an oversight to the Third-Party Auditing process. The cell will operate under the local authority.

**Constitution of the cell:**

The cell will comprise of at least 3 dedicated experts in following fields:

a. Waste management (solid and liquid)

b. Water conservation and management

c. Resource efficiency including Building materials

d. Energy Efficiency and renewable energy

e. Environmental planning including air quality management.

f. Transport planning and management.

The Cell shall induct at least two outside experts as per the requirements and background of dedicated experts.Existing environmental cells at the level of local authority can be co-opted and trained for this Cell.

**Financial Support:**

An additional fee may be charged along with processing fee for building permission for integrating environmental conditions and it's monitoring. The local authority can fix and revise this additional fee from time to time. The amount of this fee shall be deposited in a separate bank account, and used for meeting the requirement of salary / emoluments of experts and running the system of online application, verifications and the Environmental Cell.

**Functions of the Cell:**

1. The cell shall be responsible for assessing and appraising the environmental concerns of the area under their jurisdiction where building activities are proposed. The Cell can evolve and propose additional environmental conditions as per requirements.

These conditions may be area specific and shall be notified in advance from time to time. These additional conditions shall be approved following a due consultation process. These environmental conditions will be integrated in building permissions by the sanctioning authority.

2. Develop and maintain an online system for application and payment of fees. The Cell shall maintain an online database of all applications received, projects approved, the compliance audit report, random inspections made. The Cell shall maintain a portal for public disclosure of project details including self certification and compliance audit reports filed by the Qualified Building Environment Auditors for public scrutiny of compliance of environmental conditions by the project.

3. Monitoring the work of Environmental Audit process carried by the Qualified Building Auditors.

4. The Cell shall review the applications; finalize the additional environmental conditions if required within 30 days of the submission of the application to the local authority.

5. The Cell shall adopt risk based random selection of projects for verifying on site for certification of QBA, compliance of environmental conditions and five yearly audit report.

6. The Cell shall recommend to the local authority for financial penalty for non-compliance of environmental conditions by the project proponent.

7. The Cell shall recommend to the accrediting body and the local authority against any Qualified Building Environment Auditor, if any lapse is found in their work.

# Chapter 4

## Procedure and Documentation for 'Saral' Scheme for Small Residential Plots

4.1 This chapter is applicable to all small residential plots up to 105 sq.m in size forming a part of approved layout/ special areas/ unauthorized regularized colony/ village abadis/ lal dora /extended lal dora resettlement colonies and slum & JJ cluster/ Rehabilitation Colonies, excluding those within LBZ.

4.2 In case of corner plots, a maximum relaxation of 10% of the plot area shall be permitted.

4.3 All plot owners desirous of making any additions/alterations/new construction on such plots have to follow the procedure mentioned hereunder :

a. The plot owner has to give an UNDERTAKING for INTIMATION OF CONSTRUCTION START as given at Saral Form 1 at the end of this chapter.

b. After submitting this UNDERTAKING at the office of the Authority / concerned local body of appropriate jurisdiction, along with enclosures and building permit fee, the plot owner can start the construction immediately.

c. Construction design shall be as per General Building Requirements given in Chapter 7 and as per Development Control Regulations as per Annexure VI of this document. See 7.1

d. The building shall be designed by an Architect/ Engineer/Supervisor.

***Note:*** *For qualification and competency of Architect/ Engineer/Supervisor refer Annexure I.*

e. The construction has to be completed within a period of five years. If the construction is not completed within five years, the Revalidation fee has to be paid once again to revalidate.

f. The applicant/ Owner will indemnify the concerned Sanctioning Authority from structural safety and any other damages caused by constructions/ erecting of the building,

g. On completion of construction, the owner has to intimate the Sanctioning Authority having appropriate jurisdiction that the construction is complete in an INTIMATION OF COMPLETION OF CONSTRUCTION format

as given at Saral Form 2 at the end of this chapter, along with drawings/ plans duly signed by an Architect/ Engineer*. Thereafter applicant/ Owner can start occupancy of the building/ floor/ portion of the building.

h. Inspection/ Scrutiny shall not be carried out at the time of submission.

i. Rain water harvesting is required as per policy.

j. Standard Building Plans for various sizes of plots under SARAL Scheme shall have to be uploaded by the sanctioning authorities in the websites.

## Saral Form 1

## UNDERTAKING

## INTIMATION OF CONSTRUCTION START

I/we ……...son / daughter of R/o…….....……do hereby solemnly affirm and undertake to state as follows :

a) That I /we are the lawful owner/s of the plot bearing plot no. ……, address…… as per allotment letter / registered Sale Deed / perpetual lease deed / Will / Deed of Partition / any other legal document (Self- attested photocopy enclosed),

b) That the plot is not affected in any of the proposed / approved scheme or project under provisions of Master Plan for Delhi/ Zonal plan and is in conformity of the approved layout plan/ as per approved policy of Government of NCT Delhi

c) That the plot under reference is residential and not part of any district park / recreational land use as per the zonal plan / approved layout plan.

d) That the plot is not affected by the road widening as per the zonal plan / approved layout plan.

e) That the plot is not affected in any site earmarked for community facilities / parks etc.

f) That the plot is away from high tension line as per the mandatory distance clearances as per the Building Bye-Laws provisions.

g) That I / we propose to construct a house as per the provisions of the prevailing building bye laws at the time of application (plans/sections/elevations of all floors proposed to be constructed duly signed by an Architect/ Engineer/Supervisor as defined in these building bye-laws are enclosed )- for qualification and competency of Architect/ Engineer/ Supervisor. (refer Annexure I)

h) That the building plan proposed duly meets the mandatory ventilation requirements as per the Building Bye-Laws provisions.

i) That I/we have enclosed herewith a building permit fees as per following categorization of colonies on the basis of plot area:

1. For plots in Colonies under A & B category: Rs. 5000 per sq.m. *
2. For plots in Colonies under C & D category: Rs. 2500 per sq.m. *
3. For plots in Colonies under E, F, G & H category: Rs.1500 per sq.m. *

**These charges are exclusive of labour cess as prescribed by the Authority/ concerned local body.*

*Note: For subsequent sanction of revised building plans, building permit fee @10% respectively of (1), (2) & (3) above, shall be deposited.*

j) That I/we understand that the above fee is valid only for a period of five years,

k) That the building shall be constructed under due supervision, ensuring structural engineering design/ norms.

l) That if I/we do not complete the construction within five years and do not submit the INTIMATION OF CONSTRUCTION COMPLETION, an amount as decided by concerned Sanctioning Authority shall have to be paid once again for getting an extension of time/for further new construction,

m) That I/we take full responsibility for the quality of construction and structural stability of the construction using the services of a qualified professionals as referred in Annexure 1

n) That I/we shall submit an INTIMATION OF CONSTRUCTION COMPLETION to the Sanctioning Authority as and when the construction is complete, along with "as built" plans, sections and elevations and site photographs.

Enclosed: as mentioned above

Date: ……

Signature/s, Name/s and Address/s of Owner(s):

Signature, Name and Address of Witnesses:

No.1 & 2

No. 1 & 2

**Saral Form 2**

**INTIMATION OF CONSTRUCTION COMPLETION**

a) I/we ……..son / daughter of ……R/o……do hereby intimate that the construction of the building as per details given below is now complete :

Plot Area:…….

Address: ……..

b). I am hereby submitting the plans / drawings, site photographs (8" x 10"- 3 in nos.) which are in compliance with the prevailing bye- laws duly signed by the Owner(s) and Architect/ Engineer as defined in these bye-laws Annexure I.

c). Further the Structural Stability Certificate (Declaration Proforma, Chapter 2, para 2.1.3) duly signed by a structural engineer is enclosed:

d). I have not constructed any part of the building in violation of the building bye-laws. In case the Sanctioning Authority at any time identify unauthorized construction and violation of MPD provisions, the same is liable for penalties/demolition and I shall abide by the decisions of Sanctioning Authority.

Date: ……

Signature/, Name and Address of **Owner(s):**

1)

2)

# Chapter 5

## Master Plan Delhi -2021, Development Control Regulations (DCR)

This Chapter pertains to the Master Plan for Delhi Provisions (MPD) and Development Control Regulations (DCRs) prepared by the Delhi Development Authority (herein referred as Authority). As these do not essentially form a part of the Building Bye-laws, the provisions of this chapter has been placed as **Annexure VI** of these Unified Building Bye Laws.

***Note:*** *Regulations notified by the Government of India/ Delhi Development Authority, with respect to Master Plan for Delhi from time to time, shall be part of this document and shall be enforced accordingly.*

# Chapter 6

## Other Regulation Notified by Delhi Development Authority

6.1 Regulations notified by Delhi Development Authority

Regulations notified by Delhi Development Authority in exercise of power conformed by sub section (1) of section 57, of Delhi Development Act , 1957 the Delhi Development Authority, with the previous approval of the Central Government.

6.2 Building regulations for Special area, Unauthorized Regularized Colonies and Villages:

Building regulations for Special area, Unauthorized Regularized Colonies and Villages, Notified vide S.O. 97 (E), F.No.F.3 (28)2008/MP/Part], Dated 17th January 2011.

http://dda.org.in/tendernotices_docs/april11/gazette%20of%20India_1%20april%202011_97.pdf

6.3 Regularizations and Guidelines for Redevelopment:

Regularizations and guidelines for redevelopment of existing planned industrial areas, Notified vide S.O. 683(E), [F.No .F. 17(5)2007/MP], Dated 1st April, 2011.

http://dda.org.in/tendernotices_docs/april11/gazette%20of%20india%201%20april%202011_683.pdf

6.4 Regularization of Farm Houses:

Regularization of Farm Houses in Delhi, Notified vide S.O.2622 (E), [F.No.F.3 (103)96/MP], Dated 30th October, 2012.

http://dda.org.in/tendernotices_docs/nov12/SO2622_30102012_farmhouse.pdf

6.5 The (Permission of Banquet Halls) Regulations, 2012:

Notified vide S.O.2272 (E), Dated 21st September, 2012

http://dda.org.in/tendernotices_docs/oct12/banquet%20hall-291012.pdf

Note: Regulations notified by GoI/DDA are subject to modification from time to time and modified version/ Central Government notifications to be referred. In addition to above, the new regulations are also notified from time to time. These may also be referred.

# Chapter 7

## General Building Requirements/ Provisions

7.0 This part sets out the standard space requirements of various parts of a building (for all types of buildings – low/ high rise).

### 7.1 Space Requirement for Different Parts of Residential Building of Different Size of Dwelling Units

7.1.1 Main Building: The plinth or any part of a building or outhouse shall be so located with respect to highest surrounding road level from site / ground level irrespective of location of the entry level so that adequate drainage of the site is assured.

7.1.2 Interior Courtyards, Covered Parking Spaces and Garages: These shall be satisfactorily drained either by gravity or by mechanical means.

7.1.3 Minimum Size, Width and height of different components of residential premises, low/high rise as given below in Table 7.1.1

**Table 7.1: Space requirement**

| S.No. | Components of Building | Min. Requirement for a dwelling unit up to 50 sq.m area | Min. Requirement for a dwelling unit above 50 sq.m area |
|---|---|---|---|
| 1. | Habitable Rooms | Area 7.5sq.m<br>Width 2.1 m<br>Height 2.75 m | Area 9.5sq.m *<br>*If there are two rooms the Second room shall be min. 7.5sqm.<br>Width 2.4m<br>Height 2.75m |
| 2. | Kitchen | Area 3.3sq.m<br>Width 1.5 m<br>Height 2.75 m | Area 4.5 sq.m<br>Width 1.5 m<br>Height 2.75m |
| 3 | Pantry | ---------- | Area 3.0 sq.m<br>Width 1.4mt<br>Height 2.2m |
| 4. | Bathroom | Area 1.20sq.m<br>Width 1.0m<br>Height 2.2mt | Area 1.8 sq.m<br>Width 1.2 m<br>Height 2.2m |
| 5. | W.C. | Area 1.0sq.m<br>Width 0.9m<br>Height 2.20m | Area 1.2 Sq.m<br>Width 0.9 m<br>Height 2.20m |
| 6. | Combined Bath and W.C. | Area 1.80sq.m<br>Width 1.0m<br>Height 2.20m | Area 2.80sq.m<br>Width 1.20m<br>Height 2.20m |
| 7. | Store room | The area of the store has to be less than habitable room (less than 7.5 sq.m and minimum height of 2.2 m) | The area of the store has to be less than habitable room (less than 9.5 sq. m and minimum height of 2.2 m) |
| 8. | Covered Projections (Sunshades/ Cupboards) | Permitted within the plot boundary, up to 0.75 m width. No portions of any projection whatsoever shall project outside the plot boundary. | |

| | | | |
|---|---|---|---|
| 9. | Garage | Two-wheeler garage: 1 x 2 m | Area 14.50sq.m<br>Width 2.70 m<br>Height 2.40m |
| 10. | Passage way/ Corridor for low rise | Width 0.9 m | Width 1.0* m |
| 11. | Door Ways (habitable rooms) (Kitchen, bath, W.C.) | Width 0.90 m<br>Height 2.1m<br>Height 2.00m<br>Width 0.75m | Width 0.9 m<br>Height 2.1 m<br>Height 2.00m<br>Width 0.75m |
| 12. | Staircases(low rise) | Width 0.9m | Width 1.0* m |
| 13. | Veranda | 2.4m depth (max.) | |

***Notes:***

*1. Provided that the minimum clear head way under any beam shall not be less than 2.4m.*

*2. Maximum permissible height for all types of building component is 4.8 m finished from floor level to soffit level of ceiling. However, if the Architect/ Engineer desires more than 4.8 m height of any building component in the project, the double height may be permitted without counting twice in FAR, subject to the overall permissible height of building/structure.*

*3. In case of group housing all open spaces provided either in interior or exterior shall be kept free from any erections thereon and shall open to the sky. Nothing except cornice, chhajja or weather shade (not more than 0.75 m wide) shall overhang or project over the said open space so as to reduce the width to less than minimum required. Such projections shall not be allowed at height less than 2.2 m from the corresponding finished floor level.*

*4. Architectural features and landscape:* ***See 7.17.1 &7.17.2***

** For high-rise buildings, the dimensions of Stairways and Corridors shall be as provided in clause 8.4.3 and 8.4.8. and in case of addition of upper floors on existing floors in low-rise buildings where width of staircase is kept 900mm as per 1983 BBL, same maybe adopted for upper floors.*

## 7.2 Other General Requirements

7.2.1 **Kitchen:** Every room to be used as a kitchen shall have

a. Unless separately provided in a pantry, means for washing of kitchen utensils, which shall lead directly or through a sink to a grated and trapped connection to the waste pipe.

b. An impermeable floor;

c. At least a window not less than 1.0 sq.m or one tenth of the floor area whichever is more, in area opening directly to an interior or exterior open space, but not into a shaft (unless mechanically ventilated).

d. Refuge chutes in residential building 15m and above in height.

### 7.2.2 Bathroom and W. C: Every bathroom or water closet shall

a. Be so situated that at least one of its walls shall open to external /shaft wall and shall have a minimum opening in the form of window or ventilation to the extent of 0.37 sq.m unless mechanically ventilated.

b. Have the platform or seat made of watertight non-absorbent material.

c. Be provided with an impervious floor covering, sloping towards the drain with a suitable grade and not towards veranda or any other room.

d. No room containing water closets shall be used for any purpose except as a lavatory.

e. Every water closet and/or a set of urinals shall have flushing cistern of adequate capacity attached to it

f. One toilet on terrace having a maximum of 2.2 m height shall be permitted subject to condition that the area of toilet is maximum 4 sq. m and not to be counted in FAR and towards height of buildings.

g. All the sewage outlets shall be connected to the Municipal Sewerage system. Where no such system exists, a septic tank and soak pit shall be provided within the plot conforming to the requirements.

h. One Toilet is permitted within the building envelope in stilts area and basement with subject to appropriate natural/ mechanical ventilation, drainage and sanitation, provided that the maximum size does not exceed 4 sq.m which shall not be counted towards F.A.R.

7.2.3 **Mezzanine Floor**

Mezzanine floor where provided is to be counted in FAR, with a minimum clear height of 2.75m (between floor to soffit of slab).

7.2.4 **Balcony and Canopy (Residential):**

7.2.4.1 **Balcony:**

i. For Residential Plotted development: Balcony to be provided within the plot line to the max width of 1.5 m free from FAR. Wrap around continuous balconies will be allowed as long as their area does not exceed 40% of the total open area.

ii. For group housing: Balcony (isolated/wrap-around) max width of 2.0m will be permitted free from F.A.R, with the all rooms including kitchen provided it doesn't hinder fire tender movement and within the plot line. Balcony constructed more than 2.0m width, the extended part of the balcony shall be counted towards FAR.

iii. Minimum double height open terrace shall be permitted measuring @ 10.0 sq.m maximum area with a maximum depth of 3.0m free from FAR.

7.2.4.2 **Canopy: (*for residential plotted development)***

In one storied residential buildings, only such canopy shall be permitted for each individual detached blocks. In more than one storied residential buildings, canopies shall be permitted over ground floor entrances with maximum height of 3 m. from Ground level. Canopy to be provided in setback/s:

A)Front Setback

i) 2.4 m (maximum) deep in case the front setback is 3m deep.

ii) 3 m (maximum) deep in case the front setback is 6 m or more.

B) Side setbacks

i) 2.4 m (maximum) deep in case the side setback is 3 m deep.

ii) 3 m (maximum) deep in case the side setback is 6 m. or more.

*Note: Minimum 30% of the area of respective setback is to be maintained as open to sky.*

7.2.4.3 **Canopy/Porch:** buildings of other than residential plotted occupancies - See 1.4.75

Canopy/Porch of maximum extent of 8.5 m x 20 m each whereas area of one or more canopies/porches not exceeding 3% of permitted FAR, subject to the approval of Delhi Fire Service shall be permissible. The area of the canopies/porches shall not be counted in FAR and Ground Coverage.

### 7.2.5 Loft

Lofts shall be permitted in residential building and shops only. Area of such loft shall be restricted to 25% of the covered area of respective floor. Maximum height between loft and ceiling shall be 1.75 m and the clear height below the loft shall be as stipulated in these Building Bye-Laws for the space below it.

### 7.2.6 Boundary Wall Height:

Except with the special permission of the competent authority, the following norms shall apply

**7.2.6.1 For residential plotted development**

a. **Front wall:** Maximum 1.5m from highest adjacent road level at site/ ground level to be solid (stone/ brick/ masonry etc.) and above 1.5m, it should be perforated (stone jail/iron grills/vegetation) to maintain visual continuity.

b. **Side walls and back wall:** Maximum 2.4 m from ground level to be solid (stone/brick/ masonry etc.)

**7.2.6.2** In buildings of other occupancies- See 1.4.75: Maximum 2.4 m from ground level.

7.2.6.3 However, the provisions of 7.2.6.1.and 7.2.6.2 are not applicable to boundary walls of institutional buildings like jails, juvenile homes, sanatoria, hospitals, industrial buildings like workshops, factories and educational buildings like schools, colleges, including hostels and security establishments.

*Note: the above provisions shall not apply to the building/areas where boundary walls are forbidden or specific height has been recommended by the Sanctioning Authorityor as per layout plan/ comprehensive plan/zonal plan/master plan regulations.*

**7.2.6.4** Boundary wall for LDRP (Low Density Residential Plot):

For LDRP the boundary wall height shall be maximum 3.0m height for plot size 1 Acre and above for security/ safety reasons. See 7.23.5 and Annexure XV

## 7.3 Business Building/s and Mercantile Building/s:

- The minimum area for office room/shop/retail or any other space to be used as workspace shall not be less than 9 sq.m. with a minimum width of 2.4 m and minimum height to be 2.75 m and maximum height to be4.8 m.
- Minimum area for kiosk should be 4 sq.m. for informal sector.

## 7.4 Basement

The construction of the basement shall be allowed by Sanctioning Authorityin accordance with the land use and other provisions specified under the Master Plan for Delhi/ Zonal Development Plan. The basement shall have the following requirement:

7.4.1 Every basement shall be in every part be at least 2.4 m in height from the floor to the soffit of the beam and 2.4 m minimum width.

7.4.2 Adequate ventilation shall be provided for the basement. The standard of ventilation shall be the same as required for the particular occupancy according to Building Bye-Laws 7.14 and 8.4.5.

7.4.3 The maximum finish level of the ground floor above basement shall be up to 1.5 m and shall be measured with respect to average surrounding ground level/open /setback level.

7.4.4 Adequate arrangement shall be made such that surface drainage does not enter the basement.

7.4.5 The walls and floors of the basement shall be watertight and be so designed that the effect of the surrounding soil and moisture, if any, are taken into account in design and adequate damp proofing treatment is given.

7.4.6 The access to the basement shall be either from the main or alternate staircase providing access to the building. In case a lift is provided in a building (including residential buildings) the same shall also serve the basement area. (see provision 7.4.10).

7.4.7 Basement in an individual plot shall be allowed subject to the owner submitting an indemnity bond to the Sanctioning Authorityagainst any damage caused to the adjacent property.

7.4.8 If partitions in the basements are allowed by the Sanctioning Authority, no compartment shall be less than 50 sq.m in case of storage. For any other use, other than storage (in conformity with use premises) the partition should not be less than 9.5sq.m in area. In such cases, each compartment shall have ventilation standards as laid down in these building bye-laws.

7.4.9 Basement is not to be counted in FAR if used for parking, household storage and services.

7.4.10 Parking in basement can also be permitted by means of a car lift. In case of residential buildings (except group housing), ramps are not mandatory. However for other than residential buildings, ramps are mandatory for plot size above 3000 sq. m.

7.4.11 The basement can be used for storage of households, for other goods, for non-flammable material, dark rooms, strong rooms, bank cellars, stack rooms of libraries, air conditioning equipment/s and other machines used for services and utilities of the buildings etc. as per MPD.

7.4.12 For all types of buildings having more than one basement, the Fire Clearance shall have to be obtained.

7.4.13 For basement of size more than 200sq.m. of BUA, the Fire Safety measures as per NBC –Part 4 norms shall be followed.

## 7.5 Exit requirements

following general requirement shall apply to exits:

7.5.1 Every building meant for human occupancy shall be provided with exits sufficient to permit safe escape of occupants in case of fire or other emergency.

7.5.2 In every building exit shall comply with the minimum requirement of this clause, except those not accessible

for general public use.

7.5.3 All exists shall be free of obstructions.

7.5.4 No buildings shall be altered so as to reduce the number, width or portion of exits to less than required.

7.5.5 Exits shall be clearly visible and the routes to reach exits shall be clearly marked and signs posted to guide the occupants of floor concerned.

7.5.6 All exit ways shall be properly illuminated.

7.5.7 Firefighting equipment where provided along exits shall be suitably located and clearly marked, but must not obstruct the exit way and there should be clear indication about its location from either side of the exit way.

7.5.8 Alarm devices shall be installed to ensure prompt evacuation of the occupants concerned, through the exits, wherever required.

7.5.9 All exits shall provide continuous means of egress to the exterior of a building or to an exterior open space or leading to a street.

7.5.10 Exits shall be so arranged that they may be reached without passing through another unit.

## 7.6 Types of Exits

7.6.1 An exit may be doorway, corridor/passage to an internal staircase or an external staircase, or a fire tower or a fire escape staircase or to a verandah and/or terraces that have access to the street. An exit may also include horizontal exit leading to an adjoining building at the same level.

7.6.2 Lifts/escalators and revolving doors shall not be considered as exits.

## 7.7 Number and Size of Exits

The requisite number and size of various exits shall be provided, based on the occupants in each room and floor based on the occupant load, capacity of exits, travel distance and height of buildings.

## 7.8 Arrangement of Exits

7.8.1 Exits in non-sprinkled buildings shall be so located so that the travel distance on the floor shall not exceed the distances as given in Table 8.2.

7.8.2 The travel distance to an exit (refer in table 8.2) from the dead end of the corridor shall not exceed half the distance as stated above except in the case of institutional and assembly occupancy in which case it shall not exceed 6.0 m.

7.8.3 Whenever more than one exit is required for any room space or floor of a building, exits shall be placed as remote from each other as possible and shall be arranged to provide direct access in separate directions from any point in the area served.

## 7.9 Capacity of Exits:

The capacity of exits (staircase, ramps and doorways) indicating the number of which persons could be safety evacuated through a unit exit width of 0.5 m shall be as given below in table 7.2

Table 7.2 Number of Occupants per unit Exit width

| S.No | Group of Occupancy | Number of occupants | | |
|---|---|---|---|---|
| | | Stairways | Ramps | Doors |
| 1 | Residential | 25 | 50 | 75 |
| 2 | Educational | 25 | 50 | 75 |
| 3 | Institutional | 25 | 50 | 75 |
| 4 | Assembly | 40 | 50 | 60 |
| 5 | Business | 50 | 60 | 75 |
| 6 | Mercantile | 50 | 60 | 75 |
| 7 | Industrial | 50 | 60 | 75 |
| 8 | Storage | 50 | 60 | 75 |
| 9 | Hazardous | 25 | 30 | 40 |

Table 7.3 Occupant Load

| S.No | Group of Occupancy | Occupancy Load, Floor Area in m2/ Person |
|---|---|---|
| 1 | Residential | 12.5 |
| 2 | Educational | 4 |
| 3 | Institutional | 15 (See note 1) |
| 4 | Assembly | |
| | a. With fixed or loose seat and dance floors<br>b. Without seating facilities including dining rooms | 0.6 (See note 2)<br>1.5 (See note 2) |
| 5 | Mercantile | |
| | a.) Street floors and sales basements<br>b.) Upper sales Floor | 3<br>6 |
| 6 | Business and Industrial | 10 |
| 7 | Storage | 30 |
| 8 | Hazardous | 10 |

***Notes:***

1. *Occupant load in dormitory portions of homes for the aged, orphanages, insane asylums, etc. where sleeping accommodation provided, shall be calculated not less than7.5 m2 gross floor area/person.*

2. *The gross floor area shall include, in addition to the main assembly room or space, any occupied connecting room or space in the same storey or in the storeys above or below, where entrance is common to such rooms and spaces and they are available for use by the occupant so of the assembly place. No deductions shall be made in the gross area for corridors, closets or other sub- divisions the area shall include all space serving the particular assembly occupancy.*

## 7.10 Staircase Requirements

7.10.1 The number of staircases in the buildings shall be determined based on the occupant load, travel distance, dead end restriction subject to minimum two staircases in respect of buildings identified under bye-law No. 9.3; provided that where the travel distance and other requirements are complied with one staircase and the second shall be a Fire Escape.

7.10.2 All buildings, as follows, shall have a minimum of two staircases:

a) Buildings of 15m in height or above, and

b) Irrespective of height of the building (s), the buildings used as business, educational, assembly, institutional, industrial, storage and hazardous occupancies and mixed occupancies having floor area more than 500 sqm. on any floor.

7.10.3 It is mandatory to provide a ladder or any other form of open access to the overhead tank for inspection.

## 7.11 Staircase Details

a. Interior stairs shall be constructed of non-combustible material throughout.

b. Interior stairs shall be constructed as a self-contained unit and shall be mechanically ventilated if completely enclosed in low rise residential buildings.

c. A staircase shall not be arranged round a lift shaft.

d. Hollow combustible construction shall not be permitted.

e. The minimum width of internal staircase shall be as given in bye-law No. 7.11.2.

f. The minimum width of treads without nosing shall be 25 cm for an internal staircase for low rise residential buildings. In the case of other buildings including high rise residential, the minimum tread shall be 30 cm. The treads shall be constructed and maintained in a manner to prevent slipping. Winders shall be allowed in low rise residential buildings provided they are not at the head of a downward flight.

g. The maximum height of riser shall be 150mm in the case of low rise residential buildings, other buildings including high rise residential building and maximum number of risers per flight shall be limited to 12 per flight.

h. For Handrails and Grab Bars refer 11.5.3. The balusters/ railing shall not reduce the width of staircase i.e. clear width should be 1.5 m.

i. The minimum headroom in a passage under the landing of a staircase and under the staircase shall be 2.2 m.

j. For building 15m in height or more, access to main staircase shall be through a fire check door having minimum two hours fire resistance rating, which may be reduced to one hour for residential buildings (except hotel/ starred hotels).

k. No living space, store or other fire risk shall open directly into the common staircase or staircases, in case of group housing.

l. External exit door of staircase enclosure at ground level shall open directly to the open spaces or can be reached without passing through any door other than a door provided to form a draught lobby.

m. The main staircase and fire escape staircase shall be continuous from ground floor to the terrace level.

n. No electrical shafts/ AC ducts or gas pipe etc. shall pass through the staircase. However, ducting in staircase may be permitted if it is of 1 hour fire resistance rating.

o. Lift shall not open in staircase landing. Adequate Lift Lobby shall be provided. (Refer Clause 8.4.4 and Annexure VIII). (except for low rise residential plotted development upto 500 sqm.)

p. No combustible material shall be used for decoration/wall panelling in the staircase.

q. Beams/columns and other building features shall not reduce the head room/width of the staircase.

r. The exit sign with arrow indicating the way to the escape route shall be provided at a suitable height from the floor level on the wall and shall be illuminated by electric light or glow sign or florescent, connected to corridor circuits. All exit way marking sign should be flush with the wall and so designed that no mechanical damage shall occur to them due to moving of furniture or other heavy equipment's. Further all landings of floor shall have floor-indicating boards indicating the number of floor as per these bye-laws. The floor indication board shall be placed on the wall immediately facing the flight of stairs and nearest to the landing. It shall be of size not less than 0.5 m x 0.5 m.

s. Individual floors shall be prominently indicated on the wall facing the staircase.

t. In case of single staircase, it shall terminate at the ground floor level and the access to the basement shall be by a separate staircase. However, the second staircase may lead to basement levels provided the same is separated at ground level either by ventilated lobby with discharge points at two different ends through enclosures.

u. For details of FAR and Ground Coverage refer 7.17.2.n.

v. Spiral Stairs (fire escape) –

   i. The use of spiral staircase shall be limited to low occupant load and to a building of height 9 m.

   ii. A spiral fire escape shall be not less than 1.5 m in diameter and shall be designed to give adequate head room.

### 7.11.1 **Minimum Width Provisions for Stairways**

The following minimum width provisions shall be made for each stairway:

a. Other residential building e.g. flats, hostels, group housing, guest houses etc. minimum 1.5 m. For details refer chapter 11.

b. Assembly buildings and Institutional building -2.0 m.

c. All other buildings including hotels and Educational building 1.5 m.

d. For high rise buildings refer table no. 8.1

### 7.11.2 **Minimum Width Provisions for Passageway/Corridors** (clear width excluding handrail and balustrade)

The width of corridor/passageway/foyer as the case may be, shall be determined such that it shall accommodate the entire population of the floor subject to minimum width depending upon the class of occupancy as under:-

a. Residential buildings (low rise), dwelling unit type 1 m for single loaded and 1.5 m for double loaded.

b. Residential buildings, e.g., hostels, group housing etc. 1.5m for single loaded and 1.8m for double loaded.

c. Assembly buildings like auditorium theatres and cinemas 2.0 m.

d. All other buildings like commercial, institutional and hotels 1.5 m for single loaded and 1.8m for double loaded.

e. Hospital, Nursing Homes, etc. 2.4 m for both single and double loaded.

f. Ramps- for applicability in all other building types refer Chapter 8 (Clause 8.4.7)

g. Where staircase discharges through corridors and passageways, the height of corridors and passageways shall be not less than 2.4 m.

h. All means of exit including staircases lifts lobbies and corridors shall be naturally/mechanically ventilated.

i. The area of passageway/corridor including the additional area constructed over and above the prescribed/ permissible limit, should not be counted towards FAR but shall be counted in Ground Coverage (See 7.17.2.t.). The width of the additional area shall not be more than the double of the prescribed /permissible limit.

## 7.12 Doorways

7.12.1 Every doorway shall open into an enclosed stairway, a horizontal exit, on a corridor or passageway providing continuous and protected means of egress.

7.12.2 The minimum width of the exit doorways shall be equivalent to the width of the staircase as prescribed in the table no 7.1 for low-rise residential plotted development and table no 8.1 for other use premises. However in case of Hospitals, the width shall not be less than 1.25m. in case of patient room upto 2 beds and not less than 2 m in case of patient wards.

7.12.3 Exit doorways shall open outwards, that is away from the room but shall not obstruct the travel along any exit. No door when opened shall reduce the required width of stairway or landing as prescribed in the table no 7.1 for low-rise residential plotted development and table No 8.1 for other use premises. Overhead or sliding door shall not be installed.

***Note:*** *In the case of buildings where there is a central corridor, the doors of rooms shall open inwards to permit smooth flow of traffic in the corridor*

7.12.4 Exit door shall not open immediately upon a flight of stairs. A landing equal to at least, the width of the door shall be provided in the stairway at each doorway. Level of landings shall be the same as that of the floor, which it serves.

7.12.5 Exit doorways shall be openable from the side, which they serve without the use of a key.

7.12.6 Revolving doors shall not to be provided as means of fire exit.

7.12.7 Mirrors shall not be placed in exit ways or exit doors to avoid confusion regarding the direction of exit.

## 7.13 Provision of Exterior Open Spaces and Height Limitation Around the Building

7.13.1 The open spaces / setbacks, covered area, FAR shall be as per Master Plan for Delhi/ Zonal Development Plan requirements as given in the development controls of Master Plan for Delhi (Building Bye Laws-Annexure VI).

7.13.2 Every room that is intended for human habitation shall abut on an interior or exterior open space or on to a verandah open to such interior or exterior open space unless mechanically ventilated.

7.13.3 In case of High rise building, the exterior open spaces around a building as in Building Bye Laws No. 7.13.1 shall be of hard surface capable to taking load of fire engine weighing up to 45tonnes. (See also 8.2.b).

7.13.4 Mechanical ventilation shall be provided in case, kitchen and toilets do not abut either interior or exterior open spaces.

7.13.5 Up to 40% of the total setback area can be sunk for light, ventilation and access to basement, provided fire tender movement is not hindered.

## 7.14 Interior Open Space for Light and Ventilation

7.14.1 The whole or part of one side of one or more rooms intended for human habitation and not abutting on either the front, rear or side open spaces shall abut on an interior open space whose minimum width in all directions shall be 3.0 m in case of buildings not more than 15 m in height unless mechanically ventilated.

7.14.2 **Sunken Courtyard:** Sunken courtyard as 'light well' within building envelop shall be permitted for light and ventilation for basement area.

7.14.3 **Skylight:** Skylight in interior open space(courtyard) may be permitted subject to it may not act as a coverage space on the ground floor and not violate the maximum/ minimum ground coverage as per Development Control Regulations (Annexure VI).

## 7.15 Provision of parking in Stilts, Podium and Landscaping

7.15.1 In case a building is to be constructed on individual plot with stilt floor, a minimum 2.4m height at soffit level of beam and maximum 2.7m height at soffit level of slab for providing parking space is permitted. In podium(s), minimum 2.4m height at soffit level of beam and maximum 2.7m height at soffit level of slab for providing parking space can be constructed in continuation of the stilt floor having access for the parking without conflicting with the access requirement as per clause 2.0.4.j.iv and 8.2 from the plot line. The terrace of podium may be used for plantation, swimming pool, landscaping, other related structures and parking/entrance and exits as required.

7.15.2 In case of provision of stack-parking in stilt floor, the heights prescribed in 7.15.1 for stilt floor may be relaxed. However, in case of stack parking the height shall be as per design and structural safety requirement.

***Notes:***

1. *Shear wall/ bracing/ any other structural provision as per IS 1893 (Part 1), IS 13920, IS 4326 may be provided to reduce impact of soft storey in the stilt area.*

## 7.16 Joint Open Air Space

7.16.1 Every interior or exterior space, unless the latter is a street, shall be maintained for the benefit of such building exclusively and shall be entirely within the owner's own premises.

7.16.2 If such interior or exterior open air space is intended to be used for the benefit of more than one building belonging to the same owner; then the width of such open space shall be the one specified for the tallest building as specified in building byelaw, abutting such open space.

## 7.17 Exemption to Projections in Open Spaces/Covered area

The following exemption to open space shall be permitted.

7.17.1 Projections into open spaces: Every interior open space shall be kept, free from any erection thereon and shall be open to the sky. Nothing except cornice, chajjas or weather shade (not more than 0.75 m wide) shall overhang or project over the said open spaces so as to reduce the width to less than the minimum required.

Interior open to sky areas shall be allowed to cover with retractable roofing at the terrace level or at minimum double height to prevent climatic/weathering effects and the space below can be used as landscaped area, public space but can not be used for any commercial purpose.

***Notes:***

*a. Such projections shall be allowed at a height more than 2.20 m from the corresponding finished floor level.*

*b. Pergola shall be permitted if constructed in the exterior open spaces within plot line or terrace. Such pergola shall not exceed 30% of ground coverage. Such pergolas shall have a minimum clear height of 2.2 m with 40% void. On terrace, the maximum height of the pergola shall not exceed the height of the Mumty.*

7.17.2 The following shall not be included in covered area for FAR and Ground Coverage calculations, subject to Fire Safety Clearances and other mandatory clearances:

a. Machine room for lift on top floor as required for the lift machine installation.

b. Rockery, lift/ lift well, escalator/travellator well and well structures, plant nursery, water pool, swimming pool at any level (if uncovered), platform around a tree, tank, fountain, bench, chabutara with open top and / or unenclosed sides by walls, open ramps, compound wall, gate, slide swing door, fire staircase, fire towers, refuse area, fire control room, overhead water tank on top of building/open shafts, UGR, STP, ETP, cooling towers or any other service structures as per fire norms. Fire tender movement shall be unhindered.

c. Mumty over staircase on top floor maximum 3m height.

d. Culvert on Municipal drains.

e. Watch and ward cabins of total area not more than 4.5 sqm. and 6 sqm. with W.C each at entry and exit only, within the property line. Movable Porta cabins (max.size 2 sqm.) for guard room is permitted within the plot line in residential plots of size minimum 200 sqm. and above.

f. Entrance porch, canopies and balconies.

g. All pergolas at any floor level not exceeding 20% of Ground Coverage.

h. Sky bridges/Sky walks(covered or uncovered) or intermittent floors as relief in high rise buildings having landscape areas, service floors in high-rise buildings, jogging tracks, swimming pools and other public spaces shall not be counted in FAR irrespective of height and not to be counted towards ground coverage.

i. Architectural and Landscape features on ground or any other floor including rooftops such as swimming pool, terrace garden or any other features as approved by sanctioning authority, Delhi Urban Art Commission and Delhi Fire Service.

j. Architectural elements such as louvers, end wall projected upto 900mm, pergolas, claddings upto 150mm in each side, other sunshade elements (referred in clause 7.1 of these bye laws) should be free from FAR and Ground Coverage.

k. Any landscape element which has built up area as approved by sanctioning authority/ Delhi Urban Art Commission and Delhi Fire Service wherever applicable.

l. The projections (cantilever) of cupboards and shelves shall be permitted and are exempted from covered area calculations in all type of buildings except Mercantile and Business buildings. Such projection shall not exceed 0.75 m in depth and not hindered the fire tender movement.

m. Plinth steps.

n. Area of all staircase/s, Fire Tower/s in high rise/low rise buildings, excluding residential plotted development, shall not be counted in FAR and Ground coverage.

o. ESS/ Meter Room with HT/LT panel, DG Room, AC Plant room, CC TV room/Control room, Fire Control room UGR/STP/ETP and similar services are permitted in the setback subject to approval of DFS and shall not be counted in ground coverage and FAR.

p. Solar Panels at any height or level (including ground level)/terrace/roof top subject to the max. height permitted by AAI/clearance from DFS.

q. In multistory building service shafts like electrical shafts, communication shafts, fire shafts MEP and HVAC shall not be counted in ground coverage in FAR.

r. For entrance lobby/lobby area, See 8.10(i). Entrance Lobby/Lobby Area is not permitted free from FAR and Ground Coverage in residential plotted development.

s. Male and Female common toilets served by a public corridor shall be free from FAR, but shall be counted in Ground Coverage.

t. For the additional area of passageway/ corridor constructed over and above the prescribed /permissible limit, See7.11.2.i.

u. Interior open to sky areas shall be allowed to covered with retractable roofing at the terrace level or at minimum double height to prevent climatic/weathering effects and the space below can be used as landscaped area, public space but cannot be used for any commercial purpose.

7.17.3 Only temporary site office shall be allowed during construction, which shall be removed before occupancy of building or validity of building sanction whichever is earlier.

## 7.18 **Height Limit**

The height shall be related to provisions of FAR as given in **Annexure VI-** (Development Control Norms) and the provisions of open spaces.

## 7.19 **Height Exemptions**

The following structures shall not be included in the height of building covered under Building Bye-Laws.

i. Roof tanks and their supports not exceeding 1.8 m.

ii. Ventilating apparatus, air conditioning equipments and lift machine room(s) if required as per the specification of lift manufacturer and similar service equipments,

iii. Stair covered with mumty not exceeding 3.0 m in height.

iv. Chimneys and parapet wall not exceeding 1.5 m in height

v. Screen wall upto the height of 1.8 m.

vi. Solar panel at any height or level (including ground level)//terrace /roof top as per 7.17.2.(p).

vii. Height of Car lifts/passenger lifts including the machine room accessible to roof top/terrace.

viii. Toilet in terrace (refer 7.2.2.f)

ix. Pergola upto the height of the Mumty, maximum 3m above the terrace of the top floor.

## 7.20 Lighting and Ventilation of Habitable Rooms

7.20.1 All habitable rooms shall have for the admission of sun/natural light and air, one or more apertures, such as window, glazed door and fan lights, opening directly to the external air or into an open verandah not more than 2.40 m in width. In case light and ventilation to habitable space area are through an internal courtyard, the minimum dimensions of such courtyard shall not be less than 3.0 m x 3.0 m for buildings below 15m in height unless mechanically ventilated.

7.20.2 Where the lighting and ventilation requirements are not fully met through day lighting and natural ventilation, the same shall be further ensured through artificial lighting and mechanical ventilation as given in part-VII building services (Section-1 lighting and Ventilation of National Building Code of India). The latest version of the National Building Code of India shall be taken into account at the time of enforcement of these Building Bye-Laws. Notwithstanding the above, the minimum aggregate area of openings of habitable rooms and kitchens excluding doors shall not be less than 1/10 of the floor area. No portion of a room shall be assumed to be lighted if it is more than 7.50 m from the opening assumed for lighting that portion.

## 7.21 Ventilation Shaft

For ventilating the spaces for water closets and bathrooms, if not opening on the front side, rear and interior open spaces, shall open on the ventilation shaft, the size, of which shall not be less than the values given below:

Table 7.4 Size of Ventilation Shaft

| Height of Building in m | Size of ventilation shaft in sq.m | Minimum size of shaft in m |
|---|---|---|
| Upton 9.0 | 1.5 | 1.0 |
| Above 9.0 and below 15m | 3.0 | 1.2 |

However, it is not mandatory in case of buildings where mechanical ventilation is provided.

## 7.22 Parapet

Parapet walls and handrails provided on the edges of roof terrace, balcony etc. should not be less than 1.0 m. and more than 1.5 m. in height (shall not apply where roof terrace is not accessible by a staircase). However on terrace floor in the portion where DG Set, Water Tank and other services equipments are installed, light weight screen shall be constructed to hide such equipment's etc. For buildings of height 24m and above, the parapet wall/railing at terrace/roof level shall be 1.5 m height subject to approval of Fire Department.

## 7.23 Special Requirements for Occupancy/ Land Development

### 7.23.1 Industrial buildings (Factories, Workshops or any other )

a. The relevant provisions contained in the Factory Act. 1948 shall apply for the construction of factory buildings. The minimum internal height of workrooms shall not be less than 3 m with subject to height of the ground floor being not less than 3.66 m (both being clear height at soffit level) provided in these bye-law shall not apply to room intended for storage, godowns and the like purposes but only in rooms occupied by workers for purposes of manufacturing.

b. Requirements of water supply, drainage and sanitary installation shall be as per table 9.1, 9.2 and 9.14, but in no case less than one W.C. and one urinal shall be permitted.

c. Notwithstanding the provision of exits requirements, each working room shall be provided with adequate number of exits not less than two in number.

d. No exit shall be less than 1.5 m in width and 2.2 m in height and doors of such exit shall be so arranged that it can be opened easily from inside.

e. No staircase, lobby corridors or passage shall be less than 1.5 m in width. In addition to the requirement in this part, provisions contained in chapter-3 will be followed.

f. There shall be provided at all time for each person employed in any room of factory at least 3.5 sq.m of floor space exclusive to that occupied by the machinery and a breathing space of at least 15 cum. (Further the provision of Part VIII Section 1 Lighting and Ventilation of National Building code of India with amendments time to time) shall be followed.

g. The effluent from industries (industrial and biological in nature) shall be treated and shall be of quality to the satisfaction of the Authority/ concerned local body before letting out the same into a watercourse or municipal drain.

7.23.2 **Educational Buildings (School/ Colleges)**

a. Basement or cellar room may be designed, constructed, altered, converted or used for the purpose of study or instruction provided it meets fire safety requirements.

b. The minimum size of a cellar room, study room or room used for purposes of instruction shall be 5.5 m x 4.5 m and no part of such room shall be distant more than 7.5 m from an external wall abutting on the requisite open space. Every such room shall have minimum ventilation to the extent of 1/5th of its floor area.

c. A minimum of 1.0 sq.m of net floor space per student shall be provided. A central hall will not be counted in the accommodation, nor will a class room for cookery, laundry, manual instruction, drawing or science. The number of students in such building shall be calculated on this basis for the purpose of this clause.

d. Every assembly room, Fitness Centre/Multi-Gym shall have a clear height of 3.6 m except under a girder which may project 0.6 m below the required ceiling height. A clear internal height under balcony or a girder shall not be less than 3.0 m. A minimum room height for classroom in all schools and other institutions shall not be less than 3.6 m. The minimum head room under beams shall be 3 m.

e. Exit requirements shall conform to as mentioned in this chapter. No door shall be less than 1.2 m in width and 2.20 m in height. For Assembly room/ Auditorium no door shall be less than 2m in width and 2.2m in height.

f. Requirement of water supply, drainage and sanitary installation shall conform to table 9.1 to 9.6.

g. Playground shall be provided as per MPD norms/ lease conditions/ layout.

7.23.3 **Assembly Buildings (Cinema, Theatres, Multiplex, Auditorium, Museum, Exhibition hall, Gymnasium, Stadia, Restaurant, Club room etc. ) Definition of Assembly Buildings as per NBC shall be followed.**

a. The relevant provision of the Cinematographic Act/Rules/Code and relevant provisions of MPD shall apply for planning, design and construction.

b. Parking spaces wherever not specifically given shall conform to provisions as mentioned in Annexure VI & Chapter 8 (Clause 8.3) of this document.

c. Requirements of water supply, drainage and sanitation shall conform to provisions of Table 9.1, 9.2, 9.11, and 9.12 of this document.

d. Design Guidelines for Assembly Buildings, if not provided in these bye -laws and MPD then in-force, the NBC guidelines or any other statutory provisions of Republic of India shall be followed.

e. If not available in any of the referred Guidelines, then International Guidelines of credential shall be applicable.

### 7.23.4 Poultry Farms (wherever allowed as per MPD)

a. The coverage and setbacks for poultry farms shall be as allowed as per MPD.

b. **Space Planning**

i. There should be a minimum distance of 6.0 m between sheds in the farm.

ii. The minimum distance of any farm building from the property line should be 4.5 m.

iii. The minimum distance of any farm shed or farm building from the dwelling unit should be 7.5 m.

c. **Farm Shed**

i. Shed should be constructed on pillars with walls on two longer sides not higher than 1.2 m.

ii. The remaining height of the farm sheds in respect of two longer sidewalls can be covered with netting or other similar material.

iii. The maximum height of the roof of the farm shed shall not exceed 6.0 m.

### 7.23.5 Exit requirement in LDRP leading to min 6m of road width.

a. Means of entry and exit for various configurations of LDRP to and from the road width of min 6.0m wide shall be as per the illustrations (1-12) given in Annexure XV.

b. The area outside the boundary wall shall stand automatically surrendered and become the part of the public road.

c. while sanctioning the building plans the automatically surrendered part of the plot shall be counted towards the total plot area. Ground coverage and FAR shall be calculated on the total plot area including automatically surrendered area.

d. In case any other configurations not covered in the Illustrations (1-12) given in Annexure XV the same principles of clear fire tender movement shall apply.

## 7.24 Special Provisions for Other Buildings which are not covered under MPD and Building Bye Laws:

For Hospitals, Hotels & Banquets Halls, Stadiums, Jails, Court Complexes, Art Galleries, Museums, Filling Stations, Bus Terminals/ Depot, Multi-storey Parking, Sports Complexes and any other special structures/ buildings, the provisions in the following documents shall apply:

a. Development Control Regulations of MPD.

b. National Building Code.

c. Any other statutory provisions of Republic of India.

d. International Guidelines of credential.

### 7.25 Provisions in the Public Buildings for Differently Abled Persons

The buildings to be designed for differently abled persons need special treatment and the provisions for site planning, building requirements etc. are given in **Chapter – 11.**

### 7.26 Provision for Conservation of Heritage Sites including Heritage Buildings, Heritage Precincts and Natural Feature Areas.

**Provision for Conservation of Heritage Sites including Heritage Buildings, Heritage Precincts and Natural Feature Areas shall be as per Annexure –II.**

### 7.27 Rules for Development of Land

TThe provisions of Master Plan/Zonal Development Plan and norms formulated by Authority shall apply regarding sub-division of a large parcel of land into plots, open areas, roads, spaces for services and community facilities.

### 7.28 Lifts and Escalators

Provision of Lifts (Refer Annexure VIII): It shall be made for all buildings more than 15m and above in height

***Notes:***

*a. For buildings below 15m the provision of lift is on the discretion of the owners in order to facilitate movement of elderly people.*

*b. All the floors including basement and roof top/terrace shall be accessible by the lifts. The lifts provided in the buildings shall not be considered as a means of escape in case of emergency.*

#### 7.28.1 Lifts in Residential Buildings

For all residential plots size measuring upto 500 sqm and height below 15 m, opening of lift shall be allowed in the staircase landing, provided it does not obstruct movement in general and in emergency.

***Note:*** *For applicability in all other buildings, refer Chapter 8 (Clause 8.4.4)*

#### 7.28.2 Escalators/Travellator

Escalators/Travellator shall be permitted in addition to required lifts. Such escalators may be permitted in atrium area in shopping malls / public buildings and not counted towards FAR and ground coverage calculations.

#### 7.28.3 Mechanical Car Lift and Hoist

Shall be as per relevant provisions of IS codes/ National Building code/ manufacturer specifications.

### 7.29 Optical fibre Infrastructure in Buildings

All new Residential, Business, Mercantile, Institutional and Industrial Buildings shall provide duct for running Optical fibre in the premises of the Building and to the plot line thereof.

### 7.30 Zero Waste measures:

All buildings to provide separate coloured bins to collect dry waste (paper, plastic, metals, glass etc,) and wet

waste organic), as applicable. Allocate dedicated space for a centralized facility to divert the collected waste, before transferring for recycling / disposal. Provide separate bins for safe disposal of hazardous waste batteries, E-waste, Lamps, medical waste etc.) as applicable at the centralized facility. The project has to follow the hazardous Waste Management Guidelines as prescribed by the MoEF&CC, Government of India.(See Clause 10.2.4 & Annexure X.4)

**7.30.1**

All resident welfare and market associations, gated communities and institutions with more than 5000sqm area, hotels and restaurants, shall, in partnership with the local body ensure segregation of waste at source by the generators, facilitate collection of segregated waste in separate streams, handover recyclable material to either the authorized waste pickers or the authorized recyclers. The bio-degradable waste shall be processed, treated and disposed off through composting or bio-methanation within the premises as far as possible. The residual waste shall be given to the waste collectors or agency as directed by the local body. (Solid Waste Management Rules 2015 and as amended from time to time).

# Chapter 8

## Provisions for High Rise Development

### 8.0 High Rise

Any buildings of 15m and above height shall be considered as high rise building. For the buildings categorized as High Rise, clearance from Delhi Fire Service shall be mandatory. These provisions shall be in addition to the general building requirements (low/ high) given in Chapter 7 of this document and structural safety given in Chapter 9.

### 8.1 Plot Area

Plots to be used for high rise development should be located in a Layout plan, Comprehensive plans or sub division plans as prepared and approved by competent authorities/ as per policy of Government of INDIA or Government of NCT Delhi.

### 8.2 Means of Access

To be read along with 'Means of Access, clause 2.0.4.j.(iv)'of these building bye laws.

a. A building shall abut on a street or upon spaces directly connected from the street by a hard surface approach road; width of the approach road is 18.0 m ROW (7.5 m ROW for the Redevelopment Areas/ Rehabilitation Colonies/ Special Area/ Village [Lal Dora/ Firni]/ Extended Lal Dora).

b. The hard surface approach road to the building all around shall be capable of taking the weight of fire engine, weighing upto 45 ton having 6.0 m width (with 9.0 m turning circle at the corners) for building upto 40.0 m in height and 9.0 m width (with 12.0 m turning circle at the corners) in case of buildings more than 40.0 m in height shall be provided and the layout for the same shall be done in consultation with Delhi Fire Service. The said open space shall be kept free of obstructions and shall be motorable.

c. Main entrance to the premise shall be of adequate width to allow easy access to the fire tender and in no case it shall measure less than 6.0 m. The entrance gate shall fold back against the compound wall of the premises, thus leaving the exterior access way within the plot free for the movement of the fire service vehicle. If archway is provided over the main entrance the height of the archway shall not be of less than 5.0 m in height.

### 8.3 Parking Spaces

a. The parking spaces shall be provided as per the provisions of MPD or Zonal Plan as prevalent. The location of parking spaces shall be well ventilated.

b. In case of high-rise buildings parking would be permitted at any or all of the following:

   i. Open Area : 23 sq.m per E.C.S

   ii. Basements : 32 sq.m per E.C.S

   iii. Stilts: 28 sq.m per E.C.S

   iv. Podium: 28 sq.m per E.C.S

   v. Roof top:28 sq.m per E.C.S

c. Stacked Parking: 16 sq.m / Multi-level (with ramp): 30 sq.m/ Multi level- Automated parking: 16 sq.m per E.C.S is also permitted.

## 8.4 Building Components

### 8.4.1 Doorways

a. Every doorway shall open into an enclosed stairway, a horizontal exit, on a corridor or passageway providing continuous and protected means of egress.

b. No exit doorway shall be less than as required under clause 7.12.2.

c. Exit doorways shall open outwards, that is, away from the room but shall not obstruct the travel along any exit. No door, when opened, shall reduce the required width of stairway or landing to less than 0.9 m, overhead or sliding doors shall not be installed.

d. Exit door shall not open immediately upon a flight or stairs. A landing equal to at least the width of the door shall be provided in the stairway at each doorway. Level of landing shall be the same as that of the floor which it serves.

e. Exit doorways shall be openable from the side which they serve without the use of a key.

f. Mirrors shall not be placed in exit ways or exit doors to avoid confusion regarding the direction of exit.

### 8.4.2 Revolving Doors

Revolving door shall not be provided as exit doors for required exits.

### 8.4.3 Stairways

a. A staircase shall not be arranged around a lift shaft.

b. The staircase shall be ventilated to the atmosphere at each landing and a vent at the top; the vent openings shall be of0.5 sq.m in the external wall and the top. If the staircase cannot be ventilated, because of location or other reasons, a positive pressure 50 Pa shall be maintained inside. The mechanism for pressurizing the staircase shall operate automatically with the fire alarm. The roof of the shaft shall be 1 m above the surrounding roof. Glazing or glass bricks if used in staircase, shall have fire resistance rating of minimum two hour.

c. The minimum width of staircase shall be as table given below:

**Table 8.1 Minimum width of staircase for different types of buildings** (clear width excluding handrail and balustrade)

| Type of Building | Minimum Width |
|---|---|
| Residential buildings (Group Housing) | 1.5m |
| Hotel buildings | 1.5m |
| Assembly buildings like auditorium, theatres, cinemas etc. | 2.0m |
| Educational buildings up to 30 m in height<br>Above 30 m | 1.5m<br>2.0 m |
| Institutional buildings like hospitals etc. | 2.0m |
| All other buildings including commercial | 1.5m |
| Industrial building | 1.5m |

d. The minimum width of treads without nosing shall be 0.3m. The treads shall be constructed and maintained in a manner to prevent slipping. The maximum height of riser shall be 0.15 m in the case of other buildings and shall be limited to 15 risers per flight.

e. For Handrails and Grab Bars refer 11.5.3. The balusters/ railing shall not reduce the width of staircase.

f. The minimum headroom in a passage under the landing of a staircase and under the staircase shall be 2.2 m.

g. Access to main staircase shall be gained through adequate fire resistance rating (Refer NBC Part 4, Fire and Life safety Table no1 to 18) Automatic closing doors placed in the enclosing walls of the staircases. It shall be a swing type door opening in the direction of the escape.

h. No living space, store or other fire risk, shall open directly into the staircase or staircases.

i. External exit door of staircase enclosure at ground level shall open directly to the open spaces or can be reached without passing through any door other than a door provided to form a draught lobby.

j. The exit sign with arrow indicating the way to the escape route shall be provided at a suitable height from the floor level on the wall and shall be illuminated by electric light connected to corridor circuits. All exit way marking signs should be flushed with the wall and so designed that no mechanical damage shall occur to them due to moving of furniture or other heavy equipment's. Further all landings of floor shall have floor indication boards indicating the number of floor. The floor indication board shall be placed on the wall immediately facing the flight of stairs and nearest to the landing. It shall be of size not less than 0.5x0.5m and it shall be prominently placed on the wall facing the staircase.30

k. In case of single staircase it shall terminate at the ground floor level and the access to the basement shall be by a separate staircase. However, the second staircase shall lead to basement levels provided the same is separated at ground level by either a ventilated lobby with discharge points at two different ends or through enclosures with fire resistance rating door (Refer NBC Part 4, Fire and Life safety) or through a fire protected corridor.

### 8.4.4 Lifts

General requirements of lifts shall be as follows:

a. All the floors shall be accessible for 24 hours by the lifts. The lifts provided in the buildings shall not be considered as a means of escape in case of emergency. In a dual line arrangement (lifts opposite to each other) the lobby shallbe between 1.5 times to 2.5 times the depth of one car. For in-line (single line) arrangements the lobby shall be typically half of the above recommendations.

b. Grounding switch shall be provided at ground floor level; to enable the fire service to ground the lift shall also be provided.

c. The lift machine room shall be separate and no other machinery shall be installed therein.

d. Walls of lift enclosures and lift lobby shall have fire rating of two hour; (Refer NBC Part 4, Fire and Life safety). Lifts shall have a vent at the top of area not less than 0.2 sq.m

e. Lift car door shall have a fire resistance rating of half an hour.

f. Lift lobby doors in lift enclosures shall have fire resistance (Refer NBC Part 4, Fire and Life safety).

g. Collapsible gates shall not be permitted for lifts and shall have solid doors with fire resistance of at least one hour.

h. If the lift shaft and lobby is in the core of the building, a positive pressure between 25 and 30 Pa shall be maintained in the lobby and a positive pressure of 50 Pa shall be maintained in the lift shaft. The mechanism for pressurization shall act automatically with the fire alarm. It shall be possible to operate this mechanically also.

i. Lifts if communicating with the basement, the lift lobby of the basements shall be pressurized as suggested in clause 8.5.4(f) and 8.5.4(h) with self-closing door with fire resistance rating (Refer NBC Part 4, Fire and Life safety). Telephone or other communication facilities shall be provided in lift cars and to be connected to fire control room for the building.

j. Exit from the lift lobby, if located in the core of the building, shall be through a self-closing fire door of half an hour fire resistance.

k. Slope shall be provided on the floor of lift lobby, to prevent water used during firefighting, etc., at any landing from entering the lift shafts.

l. A sign shall be posted and maintained on every floor at or near the lift indicating that in case of fire, occupants shall use the stairs unless instructed otherwise. The sign shall also contain a plan for each floor showing the locations of the stairways. Alternate source of power supply shall be provided for all the lifts through a manually operated changeover switch.

m. For Pressurization Specifications of various building components refer NBC Chapter 4 Fire and Life Safety Clause 4.10 (Pressurization of Staircases- Protected Escape Routes).

### 8.4.5 **Basements**

a. Basement will be permitted within the setback lines subject to clearance from Authority/ concerned local body/ any other departments concerned, and Delhi Fire Service. Where there are no setbacks, basement should be permitted after leaving 2.0 m and where there is setback of 6m and above, it should be after leaving required 6.0 m from plot boundary ( as per provisions of development control norms of MPD).

b. Each basement shall be separately ventilated. Vents with cross-sectional area (aggregate) not less than 2.5 percent of the floor area spread evenly round the perimeter of the basement shall be provided in the form of grills or breakable stall board lights or pavement lights or by way of shafts. Alternatively, a system of air inlets shall be provided at basement floor level and smoke outlets at basement ceiling level. Inlets and extracts shall be terminated at ground level with stall board or pavement lights as before, but ducts to convey fresh air to the basement floor level have to be laid. Stall board and pavement lights should be in positions easily accessible to the fire brigade and clearly marked 'SMOKE OUTLET' or 'AIR INLET' with an indication of area served at or near the opening.

c. The staircase of basements shall be of enclosed type having fire resistance rating (Refer NBC Part 4, Fire and Life safety). The staircase shall be situated at the periphery of the basement to be entered at ground level only, from outside open air. The staircase shall communicate with basement through a lobby with self-closing doors with fire resistance rating as per relevant NBC code mentioned above.

d. For travel distance table 8.2 given below should be followed. If travel distance exceeds that given in the table below, additional staircases shall be provided.

Table 8.2- Travel Distance for Occupancy and Type of Construction

| S No | Group of Occupancy | Maximum Travel Distance Construction (m) See NBC. | |
|---|---|---|---|
| | | Type 1 & 2 | Type 3 & 4 |
| i. | Residential (A) | 30.0 | 22.5 |
| ii. | Educational (B) | 30.0 | 22.5 |
| iii. | Institutional (C) | 30.0 | 22.5 |
| iv. | Assembly (D) | 30.0 | 30.0 |
| v. | Business (E) | 30.0 | 30.0 |
| vi. | Mercantile (F) | 30.0 | 30.0 |
| vii. | Industrial (G) | 45.0 | Construction type 3 and 4 not permitted. |
| viii. | Storage (H) | 30.0 | Construction type 3 and 4 not permitted. |
| ix. | Hazardous (J) | 22.5 | Construction type 3 and 4 not permitted. |

***Notes:***

1. *For fully sprinkled building, the travel distance may be increased by 50% of the values specified in above table*
2. *Ramps shall be counted as one of the means of escape wherever permitted in National Building Code.*

e. In multi-story basements, intake ducts may serve all basement levels, but each basement level and basement compartment shall have separate smoke outlet duct or ducts. Ducts so provided shall have the same fire resistance rating as the compartment itself. Fire rating may be taken as the required smoke extraction time for smoke extraction ducts.

f. Mechanical extractors for smoke venting system from lower basement levels shall also be provided. The system shall be of such design as to operate on actuation of heat / smoke sensitive detectors or sprinklers, if installed, and shall have a considerably superior performance compared to the standard units. It shall also have an arrangement to start it manually.

g. Mechanical extractors shall have an internal locking arrangement, so that extractors shall continue to operate. Supply fans for HVAC shall stop automatically with the actuation of fire detectors.

h. Mechanical extractors shall be designated to permit air changes per hour as required by NBC Part 4, Fire and Life Safety in case of fire or distress call. However, for normal operation, air changes schedule shall be as given in Part 8, Building Services, Section 3, Air-conditioning, Heating and Mechanical Ventilation of National Building Code.

i. Mechanical extractors shall have an alternative source of supply.

j. Ventilating ducts shall be integrated with the structure and made out of brick masonry or reinforced cement concrete and in case, duct crosses the transformer area or electrical switchboard, fire dampers shall be provided.

k. Use of basements for kitchens working on gas fuel shall not be permitted, unless air conditioned. The basement shall not be permitted below the ward block of a hospital/nursing home unless it is fully sprinkled. Building services such as electrical sub-stations, boiler rooms in basements shall comply with the provisions of the Indian Electricity Rules 1956. Boiler room shall be provided at the first basement along the periphery wall with fire resistance rating (Refer NBC Part 4, Fire and Life safety) or shall be separated with the blast wall.

l. If cutouts are provided from basements to the upper floors or to the atmospheres, all side cutout openings in the basements shall be protected by sprinkler head at close spacing so as to form a water curtain in the event of a fire.

m. It is essential to make provisions for drainage of any such water on all floors to prevent or minimize water damage of the contents. The drain pipes should be provided on the external wall for drainage of water from all floors. On large area floors, several such pipes may be necessary which should be spaced 30 m apart. Care shall be taken to ensure that the construction of the drain pipe does not allow spread fire / smoke from floor to floor.

### 8.4.6 Compartmentation

The building shall be suitably compartmentalized so that fire/smoke remains confined to the area where fire incident has occurred and does not spread to the remaining part of the building. All floors shall be compartmented as per NBC (Part 4, Fire and Life safety) as amended from time to time.

### 8.4.7 Ramps

a. The ramp to basement and parking floors shall not be less than 7.2 m wide for two way traffic and 4.0 m wide for one way traffic, provided with gradient of 1:10 for cars and 1:15 for heavy vehicles. At curved portions of the ramp or for circular ramps the slope should not be more than 1:12.

b. Ramp may also be provided in setback area which can be sloped considering unhindered movement of fire Engine and in no case the gradient shall be less than 1: 10.

c. All structural design/safety aspects as per latest BIS Codes & NBC, shall be complied along with consideration of weight of Fire Engine & its maneuverings.

d. The minimum width of the ramps in hospitals shall be 2.4 m for stretcher and not for vehicular movement In this case, handrails shall be provided on both sides of the ramp.

e. Ramps shall lead directly to outside open space at ground level or courtyards or safe place.

f. In basement one entry and exit shall be provided for the floor area of 10,000sqm for each basement and if the basement area is more than 10,000sqm. in each basement, one more entry & exit ramp should be provided.

g. For plots less than 3000sqm. car lift/s can be provided in place of ramp/s subject to the approval of the Fire Department. For plot/s above 3000sqm. Ramp/s are mandatory, if used for parking.

Minimum size of the car lift shall be as per NBC norms. The lift car width should be selected such that in case of emergency, while the automobile is in the car-lift, the driver should be able to open the automobile door and come out of the automobile.

### 8.4.8 Corridors

a. Exit corridors and passageways shall be of width not less than the aggregate required width of exit doorways leading from them in the direction of travel to the exterior.

b. For the minimum width of a corridor, See7.11.2.

### 8.4.9 Glass Façade/ Service Ducts/Shafts/ Refuge Area/ Vents

a. An opening to the glass façade of minimum width 1.5 m and height 1.5 m shall be provided at every floor at a level of

1.2 m from the flooring facing compulsory open space as well as on road side. Construction that complies with the fire rating of the horizontal segregation and has any gap packed with a non-combustible material that will withstand thermal expansion and structural movement of the walling without the loss of seal against fire and smoke.

b. Mechanism of Opening: The openable glass panel shall be either left or right shall have manual opening mechanism from inside as well as outside. Such openable panels shall be marked conspicuously so as to easily identify the openable panel from outside.

c. Fire seal to be provided at every floor level between the external glazing and building structure.

d. The glazing used for the façade shall be of toughened (tempered) safety glass as per I.S.2553.

e. To avoid fire propagation vertically from lower floor to upper floor, a continuous glass facade must be separated internally by a spandrel which:

   i. is not less than 0.9 m in height; and

   ii. Extends to not less than 0.6 m above the upper surface of the intervening floor; and

f. Distance between the external wall (glass/brick) and glass façade shall not be more than 0.3 m., which will be within the Building Line.

g. To avoid fire propagation vertically from one floor to another floor, a continuous glass facade must be separated internally by a smoke/ fire seal which is of non-combustible material having a fire resistance rating of not less than two hours.

h. Service ducts and shafts shall be enclosed by walls and doors with fire resistance rating (Refer NBC). All such ducts/ shafts shall be properly sealed and stopped fire ingress at all floor levels.

i. A vent opening at the top of the service shaft shall be provided having an area between one- fourth and one-half of the area of the shaft.

j. The openable vent of minimum 2.5% of the floor area shall be provided. The openable vent can be pop out type or bottom hinged provided with fusible link opening mechanism and shall also be integrated with automatic Smoke Detection System.

   OR

   - Alternate vertical glass panels of the façade shall be openable type with the mechanism mentioned above in order to ventilate the smoke.
   - Refuge areas covered with the glass façade shall have all the panels fully openable (either left or right hinged) both from inside as well as outside.

k. Glass quality shall be as per IS Codes given below in Table 8.3:

**Table 8.3**

| | |
|---|---|
| 2553 (Part 1):1990 | Specification for safety glass: Part 1 General purpose (third revision) |
| 2835:1987 | Specification for flat transparent sheet glass (third revision) |
| 438:1994 | Specification for silvered glass mirrors for general purposes (second revision) |

| | |
|---|---|
| 5437:1994 | Specification for figured rolled and wired glass (first revision). |
| 14900:2000 | Specification for transparent float glass. |
| 16231:2014 (Part 4) | Code of Practice on use of Glass in Buildings – Safety Related to Human Impact. |

*Note: BIS Codes &National Building Code of India concerning standards, as amended from time to time; unless otherwise specified in these bye –laws shall be followed.*

## 8.5 Building Services

### 8.5.1 Staircase and Corridor Lighting

a. The staircase and corridor lighting shall be independently connected, so as it could be operated by one switch installation on the ground floor, easily accessible to firefighting staff at any time irrespective of the position of the individual control of the light points, if any.

b. Staircase and corridor lighting shall also be connected to alternate supply from parallel high-tension supply or to the supply from the stand-by generator.

c. Emergency lights shall be provided in staircase and corridor/ passageway, horizontal exits, refuge area; and all wires and other accessories used for emergency light shall have fire retardant property.

### 8.5.2 Electrical Services

a. The electric distribution cables/wiring shall be laid in separate duct which shall be sealed at every floor with non- combustible materials having the same fire resistance as that of the duct. Low and medium voltage wiring running in shaft and in false ceiling shall run in separate conduits.

b. Water mains, telephone lines, intercom lines, gas pipes or any other service line shall not be laid in the duct for electric cables. Use of bus ducts/solid rising mains instead of cables is preferred.

c. Separate circuits for water pumps, lifts, staircases and corridor lighting and blowers for pressurizing system shall be provided directly from the main switchgear panel (for detailed specifications refer NBC).

### 8.5.3 Alternate Source of Electric Supply

A stand-by electric generator shall be installed to supply power to staircase and corridor lighting circuits, fire lifts, the stand-by fire pumps, pressurization fans and blowers, smoke extraction and damper system in case of failure of normal electric supply. The generator shall be capable of taking starting current of all the machines and circuits stated above simultaneously. If the stand-by pump is driven by diesel engine, the generator supply need not be connected to the stand-by pump.

### 8.5.4 Air-conditioning

Air-conditioning shall conform to the following:

a. Escape routes like staircases, common corridors, lift lobbies, etc. shall not be used as return air passage.

b. The ducting shall be constructed of substantial gauge metal in accordance with good practice.

c. Wherever the ducts pass through fire walls or floors, the opening around the ducts shall be sealed with materials having fire resistance rating of the compartment.

d. Wherever the duct crosses a fire rated compartment, the ducts shall be rated for same fire rating as the compartment. Further depending on services passing around the duct, which may get affected in case of fire temperature rising, the ducts shall be insulated.

e. Metallic ducts shall be used even for the return air instead of space above the false ceiling.

f. Where plenum is used for return air passage, ceiling and its fixtures shall be of non-combustible material.

g. The materials used for insulating the duct system (inside or outside) shall be of non-combustible material; glass wool shall not be wrapped or secured by any material of combustible nature.

h. Air ducts serving main floor areas, corridors, etc. shall not pass through the staircase enclosure.

i. The air-handling units shall be separate for each floor and air ducts for every floor shall be separated and in no way inter-connected with the ducting of any other floor.

j. However, if the air-handling unit serves more than one floor, the recommendations given above shall be compiled with in addition to the conditions given below:

    i. Proper arrangements by way of automatic fire dampers working on smoke detector / or fusible link for isolating all ducting at every floor from the main riser shall be made.

    ii. When the automatic fire alarm operates, the respective air-handling units of the air-conditioning system shall automatically be switched off.

    iii. The vertical shaft for treated fresh air shall be of masonry construction.

    iv. The air filters of the air-handling units shall be of non-combustible materials or fire rated (Refer NBC)

    v. The air-handling unit room shall not be used for storage of any combustible materials.

    vi. Inspection panels shall be provided in the main trunking to facilitate the cleaning of ducts of accumulated dust and to obtain access for maintenance of fire dampers.

    vii. No combustible material shall be fixed nearer than 0.15 m to any duct unless such duct is properly enclosed and protected with non-combustible material (glass wool or spyglass with neoprene facing enclosed and wrapped with aluminum sheeting) at least 3.2 mm thick and which would not readily conduct heat.

### 8.5.5 **Transformers**

a. If transformers are housed in the building below the ground level it shall be necessarily in the first basement in separate fire resistance room of four hours rating. Transformer shall be dry type and shall be walls doors cut-out having fire resistance rating of four hour. The room shall necessarily be at the periphery of the basement having separate and direct access from open area at ground floor through a fire escape staircase. The entrance to the room shall be provided with a steel door of two hours fire rating. A curb of a suitable height shall be provided at the entrance in order to prevent the flow of oil from ruptured transformer into other parts of the basement. The switchgears shall be housed in a separate room separated from the transformer bays by a fire-resisting wall with fire resistance not less than four hours.

b. The transformer shall be protected by an automatic high-pressure water spray or a foam sprinkler system. When housed at ground floor level it/they shall be cut-off from the other portion of premises by Fire Resisting Walls of four hours fire resistance. They shall not be housed on upper floors.

c. A tank of RCC construction of adequate capacity shall be provided at lower basement level, to collect the oil from the catch pit in case of emergency. The pipe connecting the catch-pit to the tank shall be of non-combustible construction and shall be provided with a flame-arrester.

### 8.5.6 Gas supply

a. Town Gas / L.P.Gas Supply Pipes – Where gas pipes are run in buildings, the same shall be run in separate shafts exclusively for this purpose and these shall be on external walls, away from the staircases. There shall be no interconnection of this shaft with the rest of the floors.

b. LPG distribution pipes shall always be below the false ceiling. The length of these pipes shall be as short as possible. In the case of kitchen cooking range area, apart from providing hood, covering the entire cooking range, the exhaust system should be designed to take care of 30 cu.m per minute per sq.m of hood protected area. It should have grease filters using metallic grill to trap oil vapors escaping into the fume hood.

Note: For detailed information on gas pipe installations, refer NBC..

c. For large/ commercial kitchens, all wiring in fume hoods shall be of fiber glass insulation. Thermal detectors shall be installed into fume hoods of large kitchens for hotels, hospitals, and similar areas located in high rise buildings. Arrangements shall be made for automatic tripping of the exhaust fan in case of fire. If LPG is used, the same shall be shut off. The voltage shall be of 24V or 100V DC operated with the external rectifier. The valve shall be of the hand re-set type and shall be located in an area segregated from cooking ranges. Valves shall be easily accessible. The hood shall have manual facility for steam or carbon dioxide gas injection, depending on duty condition; and Gas meters shall be housed in a suitably constructed metal cupboard located at a well-ventilated space, keeping in view the fact that LPG is heavier than air and town gas is lighter than air.

### 8.5.7 Boiler Room

Further, the following additional aspects may be taken into account in the location of Boiler/Boiler Room:

a. The boiler shall not be allowed in sub-basement but be allowed only in the first basements away from the escape routes.

b. The boilers shall be installed in a fire resisting room of four hours fire resistance rating, and this room shall be situated on the periphery of the basement. Catch pit shall be provided at the low level. Entry to this room may be provided with a composite door of two hour fire resistance.

c. The boiler room shall be provided with fresh air inlets and smoke exhausts directly to the exterior.

d. Foam inlets shall be provided on the external walls of the building at the ground floor level to enable the fire services to use foam in case of fire.

e. The furnace oil tank for the boiler, if located in the adjoining room shall be separated by fire resisting wall of four hour rating. Entry to this room shall be provided with a composite door of two hour fire resistance. A curb of suitable height shall be provided at the entrance in order to prevent the flow of oil into the boiler room in case of tank rupture.

### 8.6 Helipad

For high-rise buildings above 200.0 m in height, helipad shall be provided.

### 8.7 Structural Safety

As per provision made for structural safety in Chapter 9, Clause 9.1

### 8.8 Disaster Management And Fire Safety

Refer Chapter no 9 of this document titled *'Provisions for Structural Safety, Natural Disaster, Fire and Building Services'*.

### 8.9 Environment Protection and Preservation Plan

Refer Chapter no 10 of this document titled 'Provisions for Green Buildings'.

### 8.10 General features – free from FAR calculations (subject to Fire Safety Clearance and other mandatory clearances):

a. Architectural feature on ground or any other floor including rooftops as approved by sanctioning Authority, Delhi Urban Art Commission and Delhi Fire Service.

b. Architectural elements such as louvers, end wall projected upto 900mm, pergolas, claddings upto 150mm in each side, other sunshade elements (referred in clause 7.1 of these bye laws) should be free from FAR and Ground Coverage.

c. Any architectural roof top structures would also be permitted free of FAR, if not used for habitable or commercial purposes.

d. Building elements such as sky bridges and landscape terraces which are meant for community purposes only shall be permitted free of FAR

e. Services can be permitted on roofs/terraces with adequate screening for the same.

f. Service floor/s shall not be counted in FAR where maximum2.2m height at soffit level of beam and 2.7m height at soffit level of slab is permitted.

g. Service area on habitable floors – like HVAC,MEP installations, Janitor Rooms, AHU Room, Electric room, LT Room, CCTV room or any other similar services shall be considered free from FAR.

h. Atrium/ Atria at any floor (refer 1.4.9) shall be permitted in all high –rise buildings and commercial buildings (including low-rise). Atrium may be enclosed by light roofing or R.C.C as per development control norms provided in the MPD.

i. CommonEntrance Lobby/Lobby area with minimum double height cubic content in high-rise building/s shall be permitted free from FAR in all the floors and shall be counted only once in the Ground Coverage. Such entrance lobby/ lobby area shall not exceed 3% of maximum permissible FAR. See 7.17.2 (r).

j. Scissor staircase would be permitted provided all travel distance and fire norms are adhered to.

k. Multilevel car parking with car lifts would be permitted with adequate fire safety (*refer 8.4.7.g.).*

l. Two or more number of dwelling units, except EWS Housing, adjoining horizontally or vertically shall be allowed to integrate by way of providing a door of 1.5m max. width or with an internal staircase of 0.9m.width and additional Lift without pit and machine room, subject to structural safety.

m. Podium(s)/Multistorey Podium with tower above shall be permitted within setback lines. The vehicular movement and parking shall be within the podium(s) and shall be free from FAR and Ground coverage calculations. The podium(s)/ Multistorey podium shall be permitted subject to fire safety requirements of these bye laws. See 7.15.

n. The lift lobby preventing stake and plume effect as per NBC norms and as approved by the Fire Services, shall be free from FAR calculations. For size of lift lobby See 8.4.4.(a).

**8.11: Activities permitted in Atrium**

1) Activities which are open to atrium (not covered from the top) or activities in public view shall be permitted i.e. Vending Booth or allied / similar commercial activities, such as Kiosks, Café, Exhibition stalls/ Sale of Merchandise / Visual Merchandise/ Short Performances/ Short promotional activities/ Fashion-shows/ etc. subject to compliance of all mandatory/statutory requirements of MPD and UBBL 2016 with clearances from various statutory authorities such as Delhi Fire Services etc.; by paying fees and charges within the ambit of UBBL 2016.

2) For all these developments/activities in the Atrium area, the Developer Entity (DE) can utilize maximum 25% of the defined Atrium area towards FAR by pouring / counting the same from its permissible FAR for use of above mentioned activities allowed in the Atrium which shall be counted towards FAR.

3) Public circulation / movement spaces shall be maintained as approved by the Fire Services Department.

4) In addition, the following conditions recommended by Delhi fire Services shall have to be strictly followed:

*i) The floor of atrium shall not be used for other than low fire hazard uses.*

*ii) Only Non-combustible materials shall be used in construction of kiosks and in decorations.*

*ii) No commercial activity, involving use of open flame, shall be permitted in the atrium floor.*

*iv) No cooking activity shall be permitted in the atrium floor except the use of hot plates.*

*v) Area for circulation/movement of visitors shall be clearly earmarked and always be kept free from all obstacles, all the times.*

*vi) Extended throw type wall sprinklers to be provided for fire protection of the kiosk area in the atrium.*

*vii) Kiosks/café in the atrium floor shall be permitted subject to condition that smoke management system for Atrium shall be validated through CFD analysis.*

*viii) A maximum of 50% of interior exit stairways are permitted to egress through an atrium on the level of exit discharge.*

*ix) Since the design of each atrium varies in many aspects, hence drawings for use of kiosks in Atrium shall be referred to Delhi Fire Service for approval.*

*x) The atrium usage shall not be more than 25% of the atrium floor and subject to above mentioned conditions.*

# Chapter 9

## Provisions for Structural Safety, Natural Disaster, Fire and Building Services

### 9.1 Structural Safety

The structural design of foundation, masonry, timber, plain concrete, reinforced concrete, pre-stressed concrete and structural steel shall be carried out in accordance with Part-VI structural design, section-1 loads, section-2 foundation, section-3 wood, section-4 masonry, section-5 concrete and section-6 steel of National Building Code of India taking into consideration all relevant standards prescribed by Bureau of Indian Standards including the standard given in IS-Code 13920-2016, 4326-1993, 13828- 1993, 13827-1993, 13935-1993, 456:2000, 800-1984, 801-1975, 875 (Part 2):1987, 875 (Part 3):1987, 875 (Part 4):1987, 875 (Part 5):1987, 883:1966,

1904:1987, 1905:1987, 2911 (Part 1): Section 1: 1979, 1893-2002 for general structural safety, cyclone/wind protection, Earthquake protection.

***Notes:***

a. *Whenever an Indian Standard including those referred in the National Building Code, the latest revision of the same shall be followed except specific criteria, if any, mentioned above against that code.*

b. *Structural Requirements of Low Cost Housing: Notwithstanding anything contained herein, for the structural safety and services for development of low cost housing, the relevant provisions of applicable IS Codes shall be enforced.*

c. *Multi-hazard safety and retrofitting: For design and retrofitting of public buildings such as hospitals, educational, institutional, power stations, infrastructure, heritage which are likely to attract large congregation of people should be located in safe areas. However, while designing such buildings/structures relevant Indian Standards and Bureau of Indian Standards codes mentioned above should be followed.*

d. *Ensuring compliance of structural, natural disaster, fire safety and building services safety and quality of materials used and construction shall rest with the owner (s) as well as professionals engaged by the owners for design/ construction/ supervision as provided in* ***Annexure I***

*Provisions in clauses 7.9, 7.10, 7.11, 7.15.3, 8.5.3, 8.5.4, 8.5.5, and 8.5.6 are to be read in conjunction with provisions made below for ensuring safety from disaster and fire.*

#### 9.1.1 Occupant Load

The population in rooms, area of floors shall be calculated based on the occupant load given in clause 7.9, Table no 7.3.

### 9.2 Disaster Management

#### 9.2.1 Seismic Strengthening/Retrofitting

Prior to seismic strengthening/ retrofitting of any existing structure, evaluation of the existing structure in regard to structural vulnerability in the specified wind/ seismic hazard zone shall be carried out by a Structural Engineer. If as per the evaluation

of the Structural Engineer, the seismic resistance is assessed to be less than the specified minimum seismic resistance as given in the note below, action will be initiated to carry out the upgrading of the seismic resistance of the building as per applicable standard guidelines.

***Note:*** *For evaluation and seismic strengthening for retrofitting of RCC buildings relevant Indian Standards and Bureau of Indian Standards codes should be followed.*

### 9.2.2 Protective Measures in Natural Hazard Prone Areas

In natural hazard prone areas identified under the land use zoning regulations, structures buildings and installations which cannot be avoided, protective measures for such construction/ development need to be properly safeguarded based on the suggestion given in Annexure VII.

### 9.2.3 Quality Control

All the construction for high-rise buildings higher than seven stories, public buildings and special structures shall be carried out under quality inspection program prepared and implemented under the Quality Auditor in seismic zones IV & V.

*Note: For competency of Quality Auditor refer Annexure I*

### 9.2.4 Quality of Materials and Workmanship

All material and workmanship shall be of good quality conforming generally to accepted standards of Central Public Works Department and Indian Standard Specification and Codes as included in Part-V Building Materials and Part-VII Construction Practices and Safety of National Building Code of India.

a. Alternative materials, methods of design and construction and tests:The provisions of these Bye-Laws are not intended to prevent the use of any material or method of design or construction not specifically prescribed by these bye-law provided any such alternative has been approved. The building materials approved by B.I.S or any statutory body will form part of the approved building material and technology as part of the Bye-Laws.

### 9.2.5 Control of Signs (Hoardings) and Outdoor Display Structures.

No advertising signs (including hoarding) on buildings or on land shall be displayed without the prior approval of the Sanctioning Authority. The standards specified in National Building Code of India as amendments time to time shall be applicable.

## 9.3 Fire Safety

The building plans for buildings covered under Rule 27 of Delhi Fire Service Rules shall be marked fire and life safety measures as per the National Building Code of India concerning minimum standards for fire prevention and fire protection as covered under Rule 33 of the Delhi Fire Service Rules as amended from time to time; unless otherwise specified in these bye –laws.

### 9.3.1. Fire Escape Staircase

a. Fire Escape will be an additional external stair case and shall not to be taken in to account for calculating the evacuation of the occupants of a specific floor. It shall not be inclined at an angle greater than 450 from the horizontal.

b. All fire escapes shall be continuous from ground to terrace.

c. Entrance to fire escape shall be separate and remote from the internal staircase.

d. The route and enclosure to fire escape shall be free of obstructions at all times, except a doorway leading to the fire escape which shall have the required fire resistance. (refer NBC Part 4).

e. Fire escape shall be constructed of non-combustible materials of required fire resistance (refer NBC Part 4). Unprotected steel frame staircase will not be accepted as fire escape.

f. Handrails shall be as per Chapter 11.

g. Scissors staircase can also be used as fire escape subject to the condition that the two entrances to the scissors staircase are not less than 9.0 m apart.

h. In case the provision is for a single staircase, the same shall be separated at the ground floor level to have an access to the basement (if provided).

i. The staircase enclosure if on external wall of the building shall be ventilated to atmosphere at each landing or in case it is in the core of the building it shall be maintained at a positive pressure as mentioned in NBC part IV, Fire and Life Safety, with both automatic and manual operation facilities and fire alarm systems.

j. Fire escape staircases shall have straight flight not less than 1.5 m wide with 30 cm treads and risers not more than 15 cm. The number of risers shall be limited to 12 per flight.

k. Spiral stairs can be used subject to, the use of spiral staircase shall be limited to low occupant load and to a building of height 9.0 m. further a spiral fire escape shall not be less than 1.5 m in diameter and shall be designed to adequate head room.

### 9.3.2. **Pressurization of Staircases (Protected Escape Routes)**

For pressurization specifications of various building components refer NBC Chapter 4 Fire and Life Safety.

### 9.3.3. **Lifts**

a. Slope in the floor of lift lobby shall be made to prevent water, used during firefighting, etc., at any landing, from entering the lift shafts.

b. A sign shall be posted and maintained on every floor at or near the lift indicating that in case of fire, occupants shall use the stairs unless instructed otherwise. The sign shall also contain a plan for each floor showing the locations of the stairways. Alternate source of power supply shall be provided for all the lifts through a manually operated changeover switch.

c. **Fire Lifts–** Following details shall apply for a fire lift:

   i. To enable fire services personnel to reach the upper floors with the minimum delay, one fire lift per 1200 sq.m of floor area shall be provided and shall be available for the exclusive use of the firemen in an emergency.

   ii. It shall have loading capacity of not less than 545 kg (8 persons lift) with automatic closing doors of minimum 0.8 m width.

   iii. The electric supply shall be on a separate service from electric supply mains in a building and the cables run in a route safe from fire, that is, within the lift shaft. Lights and fans in the elevators having wooden paneling or sheet steel construction shall be operated on 24 V supply.

iv. Firefighting lift should be provided with a ceiling hatch for use in case of emergency, so that when the lift car gets stuck up, it shall be easily openable.

v. In case of failure of normal electric supply, it shall automatically trip over to alternate supply. For apartment houses, this changeover of supply could be done through manually operated change over switch also. Alternatively, the lift shall be so wired that in case of power failure, it comes down at the ground level and comes to stand-still with door open.

vi. The operation of a fire lift is by a simple toggle or two-button switch situated in a glass fronted box adjacent to the lift at the entrance level. When the switch is on, landing call points will become inoperative and the

lift will be on car control only or on a priority control device. When the switch is off, the lift will return to normal working. This lift can be used by the occupants in normal times.

vii. The words 'Fire Lift' shall be conspicuously displayed in fluorescent paint on the lift landing doors at each floor level.

viii. The speed of the fire lift shall be such that it can reach the top floor from ground level within1 minute.

### 9.3.4. **Basement**

Refer clause 8.4.5 for details of basement.

### 9.3.5. **Refuge Chutes**

a. Hoppers to refuse chutes shall be situated in well ventilated positions and the same shall be continued upwards shall have opening at least 1.0 m above roof level for venting purpose and they shall have an enclosure

b. Wall of non-combustible material with fire resistance of not less than two hour. They shall not be located within the staircase enclosure or service shafts, or air-conditioning shafts inspection panel and doors shall be tight fitting with one hour fire resistance; the chutes should be as far away as possible from exit.

c. Refuge chambers shall have walls and floors of roofs constructed of non-combustible and impervious material and shall have a fire resistance of not less than two hours. They shall be located at a safe distance from exit routes.

### 9.3.6. **Refuge Area**

a. For buildings more than 24.0 m in height, refuge area of 15.0 sq.m or an area equivalent to 0.3 sq.m per person to accommodate the occupants of two consecutive floors whichever is higher shall be provided as under:

   i. For floors above 24.0 m and up to 39.0 m – One refuge area on the floor immediately above 24.0 m.

   ii. For floors above 39.0 m – One refuge area on the floor immediately above 39.0 m and so on after every 15.0 m.

b. The refuge area shall be provided on the periphery of the floor on a cantilever projection and open to air at least on one side protected with suitable railings.

c. Where if it is not possible to cantilever, a refuge area can be provided within the building as per DFS provision and it should be free from FAR.

d. Use of Refuge area :

i. The refuge area shall be earmarked exclusively for the use of occupants as temporary shelter and for the use of Delhi Fire Service or any other agency dealing with fire or other emergencies when occur in the building and also for exercises/ drills if conducted by the Delhi Fire Service.

ii. The refuge areas shall not be allowed to be used for any other purpose and it shall be the responsibility of the owner/ occupier to maintain the same clean and free of encumbrances and encroachments at all times.

iii. Facilities to be provided at refuge area: Adequate emergency lighting facility shall be provided.

***Note:*** *Residential flats on multistoried buildings with balcony need not be provided with refuge area. However, flats without balcony or with enclosed balconies shall be provided with refuge area, as given above.*

### 9.3.7. Manner of Providing Refuge Area

a. The refuge area shall be so located that it shall preferably face the access road(s) or otherwise face the wider open space on the side of the building perpendicular to the main access road.

b. The refuge area shall necessarily be of RCC Type.

c. The refuge area up to 54.0 m height shall be provided with railing / parapet of 1.10 m height and 1.50 m above height of 54.0 m.

d. The refuge area shall have access through a two hour rated fire door which shall be painted with a sign in luminous paint mentioning 'Refuge Area'.

e. The lifts shall only be permitted to open into Fire Tower wherever constructed.

f. Drenchers shall be provided in refuge areas above 70.0 m height.

All refuge areas shall have direct access to the nearest staircase in such a way that occupant can reach the staircase without reentering the building. The refuge area shall be free from F.A.R.

### 9.3.8. Fire Check Floor/ Fire Cut off Floor

a. A high rise building having height more than 70 m shall be provided with fire check floor (entire floor) above 70m at immediate habitable floor level and so on after every 60 meters.

b. The fire check floor shall not be used for any purpose and it shall be the responsibility of the owner/occupier/ registered society to maintain the same clean and free of encumbrances and encroachments at all times. Drinking water facility and toilet facility shall be provided.

c. Periphery of the Fire Check floor shall not be enclosed.

d. Fire Drenchers shall be provided at the periphery of the each fire check floor externally.

e. Fire Check Floor/ Fire Cut off Floor shall be free of FAR.

### 9.3.9. Provision of First Aid, Fixed Fire Installation and Fire Fighting Appliances

The firefighting measures shall be provided on all floor including basements, occupied terrace, lift rooms etc. as per the National Building Code of India, Part 4, Fire and Life Safety, (Minimum requirement for firefighting appliances) as applicable with reference to the height and class of occupancy.

9.3.10. **Fire Control Room**

For all buildings with a height of 15 m and above and Group Housing with a height of 30m and above, there shall be a control room on the entrance floor of the building with communication system (suitable public address system) to all floors and facilities for receiving the message from different floors. Details of all floor plans along with the details of firefighting equipment and installations shall be maintained in the fire control room. The fire control room shall also have facilities to detect the fire on any floor through indicator board connections; fire detection and alarm systems on all floors.

The fire staff in-charge of the fire control room shall be responsible for the maintenance of the various services and firefighting equipment and installations in co-ordination with security, electrical and civil staff of the building.

9.3.11. **Fire Notices**

Fire notices/orders shall be prepared to fulfill the requirements of the firefighting and evacuation from the building in the event of fire and other incidents. The occupants shall be made thoroughly conversant with their action in the event of the emergency, by displaying fire notices at vantage points. Such notices should be displayed prominently in broad lettering.

9.3.12. **Fire Dampers**

a. These shall be located in conditioned air ducts and return air ducts/ passages at the following points:

   i. At the fire separation wall.

   ii. Where ducts/passages enter the central vertical shaft.

   iii. Where the ducts pass though floors.

   iv. At the inlet of supply air duct and the return air duct of each compartment on every floor.

b. The dampers shall operate automatically and shall simultaneously switch off the air-handling fans. Manual operation facilities shall also be provided. (Note: For blowers, where extraction system and duct accumulators are used, dampers shall be provided).

c. Fire/smoke dampers (for smoke extraction shafts) for buildings more than 24 m in height.

   i. For apartment houses in non-ventilated lobbies / corridors operated by fusible link / smoke detectors and with manual control.

   ii. For other buildings on operation of smoke detection system and with manual control.

d. Automatic fire dampers shall be so arranged as to close by gravity in the direction of air movement and to remain tightly closed on operation of a fusible link / smoke detector.

***Note:*** *The use of type of detectors shall be to the satisfaction of Delhi Fire Service.*

9.3.13. **Fire Tower**

a. Fire towers are escape routes for multistoried buildings and these shall be considered as the safest route for escape. Their number, location and size shall depend on the building concerned, and its associated escape routes. A fire lift, internal hydrant, hose reel etc. shall be providedin the fire tower.

b. In high rise buildings with over 8 stories or 24.0 m in height, at least 50% required means of egress shall preferably be a fire tower(s).

c. The fire towers shall be constructed of walls with a two hour fire resistance rating without openings other than the exit doorways, with platforms, landings and balconies having the same fire-resistance rating.

d. The area of the lobby shall be subject to a minimum of 6.0 sq.m area and such that no side of the lobby is less than 2.0 m.

9.3.14. **Provision for Fire Safety officer**

Every owner and occupier or an association of such owners and occupiers of the following classes of buildings or premises shall appoint a fire safety officer who shall ensure the compliance of all fire prevention and fire safety measures and effective operation thereof as provided in Delhi Fire Service Act and the rules made there under, namely:-

a. Cinema houses with seating capacity of more than 1000 persons and having commercial complex with built- up area more than 10000 sq. m and building having multiple cinema with seating capacity, taken together, of 1000 persons, or more, whether, having commercial complexes or not;

b. Hotels with 100 rooms and above;

c. Underground shopping complexes, district centres, sub-central business districts, including the basement with build-up area more than 25000 sq.m

d. Multistoried non-residential buildings above 50.0 meters in height;

e. Large oil and natural gas installations such as refineries, LPG bottling plants and similar other facilities;

f. Open stadia with seating capacity more than 50,000 persons and indoor stadia with seating capacity more than 25,000 persons;

g. Hospital and nursing homes with more than 500 beds;

h. Public and semi-public buildings like large surface and sub-surface railway stations, interstate bus terminus, airports, amusements parks and other similar buildings:

Provided that Government may, by notification in the official Gazette, from time to time, include any other premises which, in its opinion, require appointment of fire safety officers.

## 9.4 Building Services

### 9.4.1. General

The Planning design and installation of electrical installations, air conditioning installation of lifts and escalators should be carried out in accordance with Part-VIII Building Services, Section–2 Electrical Installation, Section–3 Air conditioning and heating, Section-5 installation of Lifts and Escalators of National Building Code of India. However deviations from National Building Code may be done as per good Engineering Practices.

### 9.4.2. Lifts

The number and type of lifts to be provided in different buildings shall be as given in Annexure VIII.

### 9.4.3. Electrical Services

The requirements of electric sub-station are given in Annexure-IX. The provision of electric sub-station shall also require approval from concerned department/ agencies.

9.4.4. **Plumbing Services**

a. The planning, design, construction and installation of water supply, drainage and sanitation and gas supply system shall be in accordance with Part-IX Plumbing Services, section-l water supply; Section-2 Drainage and Sanitation and Section-3 Gas Supply of National Building Code of India.

***Note:*** *All plumbing services shall be provided as per design and certification of structural engineer within structural members.*

b. Requirement of water supply for various occupancies in buildings shall be as given in Table 9.1 to 9.3.

**Note:** DJB resolution No. 1816/DJB dated 20.06.2009 on levy of infrastructure fund for sanctioning bulk water supply scheme in respect of institution and commercial enterprises with mandatory conditions of recycling.

c. Requirement of sanitary fittings and installations for different occupancies in buildings shall be as given in Table 9.4 to 9.15 for calculation of occupancy.

Table 9.1: Per capita water requirement for various Occupancies/ Uses

| S.No | Type of occupancy | Consumption (in lt.) |
|---|---|---|
| 1. | Residential<br>i. EWS/LIG dwelling units(LPCD/ dwelling unit)<br>ii. . MIG and above category flats/houses/floors (LPCD/ dwelling unit)<br>iii. Hotels with lodging accommodation (per bed) | <br>135<br>225<br>180 |
| 2. | Educational<br>a) Day schools( per head per day)<br>b) Boarding schools( per head per day) | <br>45<br>135 |
| 3 | Institutional(medical hospitals) a)no. of beds not exceeding 100<br>b)no. of beds exceeding 100<br>c) medical quarters and hotels | <br>340<br>450<br>135 |
| 4 | Assembly – cinema theatres, auditoria, etc. (per seat accommodation) | 15 |
| 5. | Government or semi-public business | 45 |
| 6 | Mercantile(commercial)<br>a) Restaurants(per seat)<br>b) Other business building | <br>70<br>45 |
| 7 | Industrial<br>a. Factories where bath- rooms are to be provided.<br>b. Factories where bath-rooms are not to be provided | <br>45<br>30 |
| 8. | Storage(including warehouses) | 30 |
| 9. | Hazardous | 30 |
| 10. | Intermediate stations (excluding mail and express stops. | 45(25)* |
| 11. | Junction stations | 70(45)* |
| 12. | Terminal stations | 45 |
| 13. | International and domestic Airports | 70 |

*The values in parenthesis are for such stations, where bathing facilities are not provided.

***Note:***

*The number of persons for Sl. No. 10 to 13 shall be determined by the average number of passenger handled by the station daily with due consideration given to the staff and workers likely to use the facilities.*

Table 9.2: Flushing Storage Capacities

| S.No | Classification of building | Storage capacity |
|---|---|---|
| 1. | For tenements having common convenience | 900lt. per W.C. seat |
| 2. | For residential premises other than tenement having common conveniences. | 270lt. net for one W.C. seat each and 180lt. for each additional seat in the same flat. |
| 3. | For factories and workshops | 900lt. per W.C. seat and 180 lt. per urinal. |
| 4. | For cinemas, public assembly hall, etc. | 900lt. per W.C. seat and 350 lt. per urinal. |

Table 9.3: Domestic Storage Capacities

| S.No | No. of floors | Storage capacity | Remarks |
|---|---|---|---|
| For premise occupied tenements with common conveniences: | | | |
| 1 | Ground floor | Nil | Provide down take fittings are installed |
| 2. | Floors 2, 3, 4, 5 and upper floors | 500 litres per tenement | ___ |
| For premises occupied as flats or blocks | | | |
| 1 | Ground floor | Nil | Provide down take fittings are installed |
| 2. | Floors 2, 3, 4, 5 and upper floors | 500 litres per tenement | ___ |

***Notes:***

1. *If the premises are situated at a place higher than the road level in front of the premises, storage at ground level shall be provided on the same lines as on floors.*
2. *The above storage shallbe permitted to be installed provided that the total domestic storage calculated on the above basis is not less than the storage calculated on the number of down take fittings according to scale given below:*

    *i. Down take taps 70 l. each*

    *ii. Showers 135 l. each*

    *iii. Bathtubs 200 l. each*

Table 9.4: Sanitation requirements for Shops and Commercial Offices (Mercantile Buildings)

Gender Ratio 50 Male: 50 Female

| S.No | Sanitary Unit/Fittings | For Personnel |
|---|---|---|
| 1. | Water closet | One for every 25 persons or part thereof exceeding 15(including employees and customers). For female personnel 1 for every 10 persons. |
| 2. | Drinking water fountain | One for every 100 person with a minimum on one on each floor. |
| 3. | Wash basin | One for every 25 persons or part thereof. |
| 4. | Urinals | Same as S.No. 3 of table 9.5 |
| 5. | Cleaners' sink | One per floor minimum, preferably in or adjacent to sanitary rooms. |
| 6. | Ablution taps | One in each W.C |

***Note:*** *Number of customers for the purpose of the above calculation shall be the average number of persons in the premises for a time interval of one hour during the peak period. For male-female calculation a ratio of 1: 1 shall be assumed.*

Table-9.5: Sanitary Requirements for Hotels

| S.No | Sanitary unit | For Residential Public Staff | For non-Residential staff | |
|---|---|---|---|---|
| | | | For Male | For Female |
| 1 | Water closet (W.C) | One per 8 persons omitting occupants of the attached water closet minimum of 2 if both sexes are lodged. | 1for 1-15 persons<br>2for 16-35 persons<br>3for 36-66 persons<br>4for 66- 100 persons | 1for 1- 12 persons<br>2for 13-25 persons<br>3for 26-40 persons<br>4for 41-57 persons<br>5for 58-77persons<br>6for 78-100 persons |
| 2 | Ablution taps | One in each W.C | One in each W.C | One in each W.C |
| 3 | Urinals | Nil | Nil up to 6 persons<br>1 for 7- 20persons<br>2 for 21-45 persons<br>3for 46-70 persons<br>4 for 71- 100 persons | Nil |
| 4 | Wash basins | One per 10 persons omitting each basin installed in the room/suite | | 1for 1-12<br>2for 13-25<br>3for 26-40<br>4for 41-57<br>5for 58-77<br>6for 78-100 |
| 5 | Baths | One per 10 persons omitting occupants of rooms with bath in suite | Nil | Nil |
| 6 | Stop sinks | One per 30 beds rooms (one floor per floor minimum) | Nil | Nil |
| | Kitchen sink | One in each kitchen | One in each kitchen | One in each kitchen |

Table 9.5 (contd.): For Public Rooms

| S. No | Sanitary Unit | For Male | For Female |
|---|---|---|---|
| 1. | Water closet(W.C) | 1 per 100 persons up to 400 persons; for over 400add at the rate of 1 per 250 persons or part thereof. | 2 for 10 persons up to 200persons; over 200 add at the rate of one per 100 persons or part thereof. |
| 2 | Ablution taps | One in each W.C. | One in each W.C. |
| 3. | Urinals | Nil up to 6 persons 1 for 7-20 persons<br>2 for 21-45 persons<br>3 for 46-70 persons<br>4 for 71-100 persons | Nil |
| 4. | Wash basins | One per W.C. and urinal Provided | One per W.C. provided |
| 5. | Baths | ---------- | ---------- |
| | Stop sinks | ---------- | ---------- |
| | Kitchen sink | One in each Kitchen | One in each Kitchen |
| | | | |

***Notes:***

*i. For male-female calculation a ratio of 1: 1 shall be assumed.*

*ii. One water tap with drainage arrangements shall be provided for every 50 persons or part thereof in the vicinity of water closet and urinals.*

*iii. From 101 to 200 persons add @5%, from over 200 persons add @3%.*

Table 9.6: Sanitation Requirements for Educational Occupancy

| S.No | Sanitary Unit | Boarding Institution | | Other Educational Institution | |
|---|---|---|---|---|---|
| | | For Boys | For Girls | For Boys | For Girls |
| 1. | Water Closet (W.C.) | One for every 8 pupils or part thereof | One for every 6 pupils or part thereof | One for every 25 pupils or part thereof | One for every 15 pupils or part thereof |
| 2. | Ablution Taps | One in each W.C. | One in each W.C. | One in each W.C. | One in each W.C. |
| 3. | Urinals | One per every 25 pupils or part thereof | -- | One per every 20 pupils or part thereof | -- |
| 4. | Wash Basins | One for every 8 pupils or part thereof | One for every 6 pupils or part thereof | One for every 40 pupils or part thereof | One for every40 pupils or part thereof |
| 5. | Baths | One for every 8 pupils or part thereof | One for every 6 pupils or part thereof | -- | -- |
| 6. | Drinking Water Fountains | One for every 50 pupils or part thereof | One for every 50 pupils or part thereof | One for every 50 pupils or part thereof | One for every 50 pupils or part thereof |
| 7. | Cleaner's Sink | One per Floor minimum | One per Floor minimum | One per Floor minimum | One per Floor minimum |

Table 9.6 (contd.): Sanitation Requirements Nursery Schools

| S.No | Sanitary unit | Requirement |
|---|---|---|
| 1 | Water Closet | one per 10 pupils |
| 2 | Ablution Taps | One in each W.C. |
| 3 | Urinals | -- |
| 4 | Wash Basins | One for every 15 pupils or part thereof |
| 5 | Baths | One bath sink per 40 pupils |
| 6 | Drinking Water Fountains | One for every 50 pupils or part thereof |
| 7 | Cleaner's Sink | -- |

***Notes:***

*i. One water tap with draining arrangements shall be provided for every 50 persons or part thereof, in the vicinity of water closets and urinal.*

*ii. For teaching staff, the schedule of sanitary units to be provided shall be the same as in case of office buildings (Table 9.9).*

Table 9.7: Sanitation Requirements for Institutional (Medical) Occupancy- Hospital

| S.No | Sanitary Unit | Hospitals With indoor Patient Ward | Hospitals With outdoor Patient Wards | |
|---|---|---|---|---|
| | | For Males & females | For Males | For Females |
| 1 | Water Closet | One for every 6 beds or part thereof | Two for every 100 persons or Part thereof | Three for every 100 persons or part thereof |
| 2 | Ablution Taps | One in each W.C. | One in each W.C. | One in each W.C. |
| 3 | Wash Basins | 2for up to 30 beds; add one for every additional 30 beds; or part thereof | One for every 100 persons or part thereof | One for every 100 Persons or part thereof. |

| | | | | |
|---|---|---|---|---|
| 4 | Baths with Shower | One bath with shower for every 8 beds or part thereof. | -- | -- |
| 5 | Bed pan washing sink | One for each ward | | |
| 6 | Cleaner' Sinks | One for each ward | One per floor minimum | One per floor minimum |
| 7 | Kitchen sinks & dish Washers (where Kitchen is provided) | One for each ward | -- | -- |
| 8 | Urinals | | One for every 50 persons or part thereof | -- |

Table 9.7 (contd.): Administrative Buildings

| S.No | Sanitary Unit | For Males | For Females |
|---|---|---|---|
| 1 | Water Closet (W.C.) | One for every 25 persons or part thereof | One for every 15 persons or part thereof |
| 2 | Ablution Taps | One in each W.C. | One in each W.C. |
| 3 | Wash Basins | One for every 25 persons or part thereof | One for every 25 persons or part thereof |
| 4 | Baths with Shower | One on each floor | One on each floor |
| 5 | Bed pan washing sink | -- | -- |
| 6 | Cleaner's Sink | One per floor minimum | One per floor minimum |
| 7 | Kitchen sinks & dish Washers (where Kitchen is provided) | One for each floor | One for each floor |
| 8 | Urinals | Nil up to 6 persons 1 for 7-20 persons<br>2 for 21-45 persons<br>3 for 46-70 persons<br>4 for 71-100 persons<br>From 101 to 200 persons add at the rate of 3%; for over 200 persons add at the rate of 2.5% | -- |

Table-9.8: Sanitation Requirements for Institutional (Medical) Occupancy- (staff quarters and Hostels)

| S.No | Sanitary Unit | Doctor's Dormitories | | Nurses Hostel |
|---|---|---|---|---|
| | | For Male Staff | For Female Staff | |
| 1 | Water Closet | One for 4 persons | One for 4 persons | One for 4 persons or part thereof |
| 2 | Ablution Taps | One in each W.C. | One in each W.C. | One in each W.C. |
| 3 | Wash Basins | One for every 8 persons or part thereof | One for every 8 persons or part thereof | One for every 8 persons or part thereof |
| 4 | Bath (with shower) | One for every 4 persons or part thereof | One for every 4 persons or part thereof | One for every 4 persons or part thereof |
| 5 | Cleaner's Sink | One per floor minimum | One per floor minimum | One per floor minimum |

Table 9.9: Sanitation Requirements for Governmental and Public Business Occupancy and Offices

| S.No. | Sanitary Unit | For Male Personnel | For female Personnel |
|---|---|---|---|
| 1 | Water Closet (WC) | One for 25 persons or part thereof | One for 15 persons or part thereof |
| 2 | Ablution taps | One in each WC | One in each WC |

| | | | |
|---|---|---|---|
| 3 | Urinals | Nil up to 6 persons 1 for 7-20 persons<br>2 for 21-45 persons<br>3 for 46-70 persons<br>4 for 71-100 persons<br>From 101 to 200 add @ 2.5 % | ---- |
| 4 | Wash Basins | One for every 25 persons or part thereof. | ----- |
| 5 | Drinking Water fountains | One for every 100 persons with a minimum of one on each floor | ----- |
| 6 | Baths | Preferably one on each floor | ----- |
| 7 | Cleaner's Sinks | One per floor minimum; preferably in or adjacent to sanitary rooms. | ------ |

***Note:***

*One water tap with drainage arrangements shall be provided for every 50 persons or part thereof in the vicinity of water closet and urinals*

Table 9.10: Sanitation requirements for residencs

| S.No. | Sanitary Unit | Dwelling with individual conveniences | Dwelling without individual conveniences. |
|---|---|---|---|
| 1 | Bath Room | One provided with water tap | One for every two tenement |
| 2 | Water Closet (WC) | One | One for every two tenement |
| 3 | Sink (or Nahani) in the Floor | One | ------- |
| | Water Tap | One | One with drainage arrangement in each tenement. One in common bath rooms and common water closet. |

***Note****:*

*Where only one water closet is provided in a dwelling, the bath and water closet shall be separately accommodated.*

Table 9.11: Sanitation Requirements for Assembly Occupancy Buildings (Cinema, Theatres, Auditoria, etc.) Gender Ratio 50 Male:50 Female

| Sl. No. | Sanitary Unit | For Staff | | For Public | |
|---|---|---|---|---|---|
| | | Male | Female | Male | Female |
| 1. | Water Closet And Urinal | 1WC+2 Urinals/150<br>2WC's+3Urinals/150-300<br>2WCs+4Urinals/301-450<br>3WCs+5Urinals/451-600<br>3WCs+7Urinals/601-900<br>1WC+1 Urinal for every 150 thereafter | 3WCs/150<br>6WC's/151-300<br>9WCs/301-450<br>12WCs/451-600<br>14WCs/601-900<br>1WC every 100 thereafter | One WC for 15 persons.<br>Two WCs for 16-35 persons.<br>Urinal: Nil up to 6 persons<br>1 for 7-20 persons<br>2 for 21-45 persons. | One WC for 1-12 persons.<br><br>Two WCs for 13-25 persons. |
| 2. | Ablution Taps | One in each WC | One in each WC | One in each WC | One in each WC |

| | | | | | |
|---|---|---|---|---|---|
| 3. | Wash Basins | One for every 200 persons or part thereof. For over 400 persons, add @ 1 per 250 persons or part thereof. | One for every 200 persons or part thereof. For over 200 persons, add @ 1 per 150 persons or part thereof. | One for 1-15 persons. Two for 16-35 | One for 1-12 persons Two for 13-25 persons. |
| 4. | Cleaner's Sink | One per floor, minimum. | | | |
| 5. | Drinking Water Fountain | One per 100 persons or part thereof. | | | |

***Note:*** *For male-female calculation a ratio of 1: 1 shall be assumed.*

Table:-9.12: Sanitation Requirements for Assembly Occupancy Buildings (Art, Galleries, Libraries and Museums)

| Sl. No. | Sanitary Unit | For Public | | For Staff | |
|---|---|---|---|---|---|
| | | Male | Female | Male | Female |
| 1 | Water Closet (WC) | One for 200 persons up to 400 persons. For over 200 persons, add @ 1 per 250 persons or part thereof. | One per 100 persons up to 200 persons. For over 200 persons add @ 1 per 150 persons or part thereof. | One for 15 persons. Two for 16-35 persons. | One for 1-12 persons. Two for 13-25 persons. |
| 2 | Ablution Taps | One in each WC | One in each WC | One in each WC | One in each WC |
| 3 | Urinals | One for 50 persons or part thereof | ------ | Nil up to 6 persons 1 for 7-20 persons 2 for 21-45 persons | ----- |
| 4 | Wash Basins | One for every 200 persons or part thereof. For over 400 persons, add @ 1 per 250 persons or part thereof. | One for every 200 persons or part thereof. For over 200 persons, add @ 1 per 150 persons or part thereof. | . One for 1-15 persons. Two for 16-35 | One for 1-12 persons Two for 13-25 persons. |
| 5 | Cleaner's Sink | One per floor, minimum. | | | |

Table 9.13: Sanitation Requirements for Restaurant.

| Sl. No. | Sanitary Unit | For Public | | For Staff | |
|---|---|---|---|---|---|
| | | Male | Female | Male | Female |
| 1. | Water Closet(WC) | | | | |
| 2. | Ablution Taps | One in each WC | One in each WC | One in each WC | One in each WC |
| 3. | Urinals | | | | |
| 4. | Wash Basins | One for every water closet. | | | |
| 5 | Kitchen Sinks & Dish Washer | One for each Kitchen | | | |
| 6. | Service Sink | One in the restaurant. | | | |

Table:-9.14: Sanitation Requirements for Factories.

| Sl. No. | Sanitary Unit | For Male Personnel | For female personnel |
|---|---|---|---|
| 1. | Water closets | 1 for 15 persons.<br>2 for 16-35 persons.<br>3 for 36-35 persons.<br>4 for 66-100 persons.<br>For 101 to 200 persons add @ of 3% From over 200 persons, add @ 2.5% | 1 for 1-12 persons.<br>2 for 13-25 persons.<br>3 for 26-40 persons.<br>4 for 41 -57 persons.<br>5 for 58-77 persons.<br>6 for 78 -100 persons.<br>For 101 to 200 persons add @ of 5%. From over 200 persons, add @ 4%. |
| 2. | Ablution Taps | One in each WC | One in each WC |
| 3. | Urinals | Nil up to 6 persons 1 for 7-20 persons<br>2for 21-45 persons.<br>3 for 46-70 persons.<br>4 for 71 -100 persons.<br>For 101 to 200 persons add @ of 3%. From over 200 persons, add @ 2.5%. | |
| 4. | Washing Taps with draining arrangement | One for every 25 persons or part thereof. | |
| 5. | Drinking Water Fountains | One for every 100 persons with a minimum of one on each floor. | |
| 6. | Baths preferably Showers. | As required for particular trade or occupation. | |

***Note:*** *For many trades of a dirty or dangerous character, more extensive provisions are required.*

Table 9.15: Sanitary Requirements for Large Stations and Airports.

| Sl. No. | Place | W.C for Males | W.C for Females | Urinals for Males only |
|---|---|---|---|---|
| 1 | Junction Stations, intermediate Stations and Substations | 3 for first 1000 persons and 1 for subsequent 1000 persons or part thereof. | 4 for first 100 persons and 1 for every additional 1000 persons or part thereof. | 4 for every 1000 person and 1 for every additional 1000 persons or part thereof. |
| 2 | Terminal Stations and Bus Terminals | 4 for first 1000 persons and<br>1 for every additional 1000 persons or part thereof. | 5 for every 1000 person and 1 for every additional 200 persons or part thereof. | 6 for every 1000 person and 1 for every additional 1000 persons or part thereof |
| 3 | Domestic Airports<br>Minimum<br>For 200 persons<br>For 400 persons<br>For 600 persons<br>For 800 persons<br>For 1000 persons | 2*<br><br>5<br>9<br>12<br>16<br>18 | 4*<br><br>8<br>15<br>20<br>26<br>29 | 2*<br><br>6<br>12<br>16<br>20<br>22 |

| | | | | |
|---|---|---|---|---|
| 4 | Internal Airports | | | 8 |
| | For 200 persons | 6 | 10 | |
| | For 600 persons | 12 | 20 | 16 |
| | For 1000 persons | 18 | 29 | 22 |

***Note:****Provision for wash basins, baths including shower stalls, shall be in accordance with Part ix Section 2- Drainage and Sanitation of National Building Code of India and amendments time to time.*

*At least one Indian style water closet shall be provided in each toilet. Assume 50 % males and 50 % females in any area.*

### 9.4.5. Water Supply arrangements (General Guidelines)

a. Provision shall be made for two underground water tanks for the storage of potable and non- potable water with adequate pumping arrangements to supply water to various floors in the property. Capacity of the underground water tank for storing potable water shall be 50% of the potable water requirement estimated as per the norms of the water utility department i.e. Delhi Jal Board. For storing non- potable water the underground water tank storage capacity shall be 50% of the non- potable water demand estimated as per the norms of water utility department i.e. Delhi Jal Board and to meet horticulture requirement in the property. While according to sanction to layout plan the authority/ concerned local body shall make a special sanction that provisions for space shall be kept for construction of underground reservoirs of adequate capacities along with booster pumping stations.

b. For new construction: the clearance of plan for the construction of new building only is given if the provisions are Delhi Jal Board regulation compliant. Provision should be made for an underground tank for storage of water with a capacity at minimum 150 lts / Person (4.5 persons per dwelling unit) with adequate pumping arrangements. Filtered water connections will be allowed only for use of drinking and bathing needs. Delhi Jal Board regulations permit only single bulk water connection if dwelling unit in a property exceeds 6 nos.

c. Arrangements as given in table 9.1 above shall also be provided in Group Housing Societies.

d. Dual piping Systems/ Plumbing arrangement in case of new construction shall be made in a way that portable water is used for drinking cooking bathing and other portable purposes and non-potable water is used for flushing horticulture and other non-potable purposes.

e. Double Valve Low Capacity Cistern should be provided instead of conventional 12.5 litres capacity

f. The plumbing arrangement in case of new constructions shall be made in a way that the potable water shall be used for drinking, cooking & bathing only and for rest of the uses, provision for ground water can be made with dual piping system.

g. Low capacity cistern should preferably be provided instead of normal 12.5 lts capacity.

***Notes:***

*a. For water demand calculations in the residential dwelling units, occupancy is consider as 5 persons/D.U. and occupancy in case of hotels, hostels, hospitals etc. is to be considered as per the number of beds.*

*b. For Assessment of water demand (Clause 1.2 of IS 1172, Code of Basic Requirement for Water Supply, Drainage and Sanitation shall be referred).*

*c. Water demand for sanction of water supply scheme across all categories shall be calculated as per*

i. *CPHEEO Manual for water Supply and Treatment,*

ii. *IS 1172 Code of Basic Requirement for Water Supply, Drainage and Sanitation,*

iii. *DJB resolution No. 1816/DJB dated 20.06.2009 on levy of infrastructure fund for sanctioning bulk water supply scheme in respect of institution and commercial enterprises with mandatory conditions of recycling,*

iv. *Norms decided by Department from time to time in case of residential buildings/developments and where provisions are not available in the above referred manual/code/circular.*

9.4.6 Service plan for Group Housing of any plot size and other Buildings as per sub-clause 1.4.75 having plot area equivalent or more than 3000sqm shall have to be approved by Delhi Jal Board in Common Application Form (CAF) only. This is not applicable for Residential Plotted development.

9.4.7 **Child Care Room**

The Child Care Room is meant to be used for the purpose of baby care, feeding, changing room for babies/children etc. with an aim to give comfort to mother and baby/ child in all the Public Buildings and Private Establishments.

a) The child care room shall be provided at convenient location on the ground floor of all the public/private buildings, easily accessible to all including persons with disabilities.

b) The location of the child care room can be provided anywhere in the floor, preferably away from the general toilets, but suitably located near canteens/food stalls/pantry/common area or similar places. It should have ample visibility yet provide for adequate privacy and placed in a secure location.

c) The child care room shall be free from FAR calculation.

d) The minimum dimension of the child care room shall be as per habitable room as given in table 7.1 of UBBL-2016.

Area 9.5sq.m

Width 2.4m

Height 2.75m

e) The child care room shall have all the following features.

i) Feeding cabin with adequate number of nursing chairs and counters.

ii) One nursing counter with sink, mirror, soap dispenser and disposal bin.

iii) Cradle with quilts.

iv) It should be adequately ventilated.

v) It should also be accessible by persons with disabilities.

vi) Adequate level of privacy with curtains or any other measures shall be provided in the feeding cabin and with door at the entrance of child care room.

vii) Sharp edges and hard corners shall be avoided inside the child care room.

viii) Use of non slip floor surfaces, easily cleanable finishes etc. is preferable.

ix) An emergency alarm bell/ button should be provided alongside the light button in case of emergency.

x) The location of the child care room should be provided in way-finding signage and in site plan for its easy reach.

# Chapter 10

## Provisions for Green Buildings

10.0 **Green Buildings** - See ***Annexure X***

All buildings on various plot sizes should comply with the green norms and conform to the requirements mandatory for sanction as mentioned in this chapter.

These are not specific to any rating system and are not intended to provide a single metric indication of overall building performance. These provisions allows the practitioners to easily exercise their engineering judgment in holistically and objectively applying the underlying principles of sustainability to a development or building facility, considering its functionality and required comfort level.

### 10.1 Provisions and Applicability

These provisions for green buildings are applicable on all plots more than 105 sq. m in size The green building provisions on various plot sizes are indicated in the table below:

Table 10.1-Provisions and applicability for various plot sizes (all use premises)

| Category of Plot Sizes (sq.m.) | Category of Plot Sizes (sq.m.) | Provisions for Green Building (as per Clause 10.2) |
|---|---|---|
| I | up to105 | Optional usage of 2 (a), 2(b). |
| II | 105 to 500 | 1(a), 2(a),2(b), 4(a) |
| | 500 to 1,000 | 1(a), 1(c), 2(a),2(b), 4(a) |
| | 1,000 to 3,000 | 1(a), 1(c), 1(d), 2(a),2(b), 3(b), 4(a) |
| III | Above 3,000 | 1(a), 1(b), 1(c), 1(d), 2(a), 2(b), 3(a), 3(b), 4(a), 4(b) |

***Notes:***

**The schemes/ projects formulated on the basis of provisions given in Master plan/ Zonal Development Plan will require approval as indicated:*

*{Chapter 3 of these Bye-Laws, NBC (latest), ECBC 2007 or latest, BEE Star rating/ IGBC/ GRIHA Certification}*

***EIA**- Environmental Impact Assessment Study Report, **ECC**- Environmental Clearance Certificate, **MoEF** – Ministry of Environment and Forest,**NBC** – National Building Code, **ECBC** – Energy Conservation Building Code, **BEE** – Bureau of Energy Efficiency, **LEED**– Leadership in Energy and Environment Design, **IGBC** – Indian Green Building Council, **GRIHA**– Green Rating for Integrated Habitat Assessment, **TERI** – The Energy and Resources Institute.*

*The prevailing provisions of the above shall be applicable. However if there are any modification in the same, the modified provisions shall become automatically applicable.*

### 10.2 Provisions for Sanction:

(As per Annexure – X)

1. Water Conservation and Management

a. Rain Water Harvesting (by Recharge)

b. Low Water Consumption Plumbing Fixtures

c. Waste Water Recycle and Reuse

d. Reduction of hardscape

2. Solar Energy Utilization

a. Installation of Solar Photovoltaic Panels

b. Installation of Solar Assisted Water Heating Systems

3. Energy Efficiency

a. Low Energy Consumption Lighting Fixtures (Electrical Appliances – BEE Star and Energy Efficient Appliances)

b. Energy Efficiency in HVAC systems

4. Waste Management

a. Segregation of Waste

b. Organic Waste Management

10.3 In case Owner(s) of properties desire to procure green building ratings from one or more rating bodies, they may suitably incorporate any other provisions if required and additional incentive FAR as per prevalent MPD may be availed.

10.4 The installation of Solar Photovoltaic Power panels are to be installed in all types of Occupancy or Use group as mentioned in sub-clause 1.4.75 of these bye-laws. Refer Annexure X (5) for details.

**10.5 Electric Vehicle Charging Infrastructure (EVCI):**

The Ministry of Power, Govt. of India issued Guidelines & Standards for charging infrastructure for electric vehicles on 14.12.2018 and revised guidelines on 01.10.2019. These Guidelines & Standards are subject to modification from time to time and modified version of Central Government is to be referred.

Based on the occupancy pattern and the total parking provisions in the premises of the various building types, charging infrastructures shall be provided only for EVs (Electric Vehicles), which is currently assumed to be 20% of all 'vehicle holding capacity'/'parking capacity' at the premise.

Additionally, the building premise will have to have an additional power load, equivalent to the power required for all charging points {in a Public Charging Station (PCS)} to be operated simultaneously, with a safety factor of 1.25 (refer 6. Explanatory Note on Electric Vehicle Charging Infrastructure - Annexure X).

10.5.1 Residential Buildings (plotted house)

Table 10.2: Charging Infrastructure requirements for individual house/ self-use

| | |
|---|---|
| Building type | Plotted House |
| Ownership of Station | Private (Owner) |
| Connection and Metering | Domestic meter |
| Type of Charger | Slow chargers as per owner's specific requirements |
| Modes of Charging | AC (Single charging gun) |
| Norms of Provisions | Min. 1 SC and additional provisions as per the owner individual. |

Note:

* *The Charging Infrastructure (CI) installed by a home owner shall be construed as a Private CI meant for self-use (non-commercial basis) as per the note at clause no D of the Explanatory Note at Annexure X- Appendix II.*

10.5.2 All other buildings (including Group Housing)

Any PCS installed at Public/Private areas or building premises of any category that caters to commercial mode of charging of EVs shall be deemed as a Public Charging Station and shall have to install the minimum requirements of chargers as specified in the Guidelines & Standards of Ministry of Power, GoI. However, in order to provide sufficient charging points for the EV share in all vehicles, ratio of types of chargers is recommended in the table below -

Table 10.3: Charging Infrastructure requirements for PCS (commercial use)

For table Refer Appendix I

* For Explanatory Note on Electric Vehicle Charging Infrastructure – Refer Appendix II.

# Chapter 11

## Provisions for Universal Design for Persons with Disabilities, Elderly and Children

11.0 **Applicability**

These regulations are applicable to all buildings and facilities used by the public such as educational, institutional, assembly, commercial, business, mercantile buildings and group housing etc. It shall not apply to private residences (Residential Plotted Development). For Residential Group Housing, it shall apply to the common areas in the ground level/stilts.

11.1 ForAccessible buildings, at least one entrance and exit per facility should be accessible to a wheelchair user and persons with disabilities such as visually impaired, etc. For new buildings, the accessible entrance(s) should be the main entrance(s), and not side or back entry, intended for use of public.

11.2 Whereverwaiting areas, coffee shops, display areas, merchandising departments, service areas, ticket counters, refreshment stands etc. are provided for public use, these facilities should be accessible to all Persons with Disabilities and not just wheelchair user only.

11.3 In all buildings at least one unisex accessible washroom/toilet should be provided. In Multi-Level buildings, all floors should have one such facility near the general washrooms.

*Note: For additional and detailed requirements other than specified in these Unified Building bye- Laws 2016, the Harmonized Guidelines and Space Standards for Barrier Free Built Environment for Persons with Disability and Elderly Persons – February 2016 published by Ministry of Urban Development, Govt. of India shall be followed along with NBC Chapter 3-Clause 13 Requirements for accessibility in Built environment for elders and persons with disabilities andAnnex B: Anthropometrics and Requirements for Accessibility in Built-Environment for Elders and Persons with Disabilities.*

11.4 **Site Development**

Level of the roads, access paths and parking areas shall be described in the plan along with specification of the materials.

11.4.1 **Access Path / Walk Way**

Access path from plot entry and surface parking to building entrance shall be minimum of 1.8 m wide having even surface without any steps. Slope, if any, shall not have gradient greater than 5%. Selection of floor material shall be made suitably to attract or to guide visually impaired persons (limited to coloured floor material whose colour and brightness is conspicuously different from that of the surrounding floor material or the material that emits different sound to guide visually impaired persons; hereinafter referred to as "guiding floor material". Finishes shall have a non- slip surface with a texture traversable by a wheel chair. Curbs wherever provided should blend to a common level.

11.4.2 **Parking**

For parking of vehicles of persons with disabilities, the following provisions shall be made:

a. Surface parking for two car spaces shall be provided near accessible entrance/lift lobby for the persons with disabilities maximum travel distance of 30.0 m. In case the access is through lift, the parking shall be located within 30 m of the lift lobby.

b. The width and length of parking bay shall be minimum 3.6 m X 5.0m. The minimum width includes the transfer area beside the car with a minimum of 1200 mm. Two accessible parking spaceswith one shared transfer area are widely used and shall have a minimum width of 6m.

c. The information stating that the space is reserved for wheel chair users shall be conspicuously displayed.

d. Guiding floor materials shall be provided or a device, which guides visually impaired persons with audible signals, or other devices, which serves the same purpose, shall be provided.

e. Where there are two accessible parking bays adjoining each other, than 1200mm side transfer bay shall be shared by the two parking bays. The transfer zones, both on the side and the rear should have yellow or white cross – hatch road markings and connected to an accessible route 1200mm wide.

f. A minimum of one accessible designated parking space shall be provided in every parking area;

   i) For up to 10 parking spaces, one designated accessible parking space shall be provided;

   ii) For up to 25 parking spaces, two designated accessible parking space shall be provided;

   iii) For up to 50 parking spaces, three designated accessible parking spaces shall be provided;

   iv) For up to 100 parking spaces, four designated accessible parking spaces shall be provided;

   v) For up to 200 parking spaces, six designated accessible parking spaces shall be provided;

   vi) For over 200 parking spaces, six designated accessible parking spaces for 200 parking spaces and one for each additional 100 parking spaces shall be provided.

*Note : In specialized facilities such as health care facilities, shopping areas and recreational facilities, a greater number of designated accessible parking spaces should be considered.*

g. Space should be provided for passenger drop-off / alighting points for taxis, public transport and also for large vehicles such as vans, etc, as near as possible to the main accessible entrance. Vehicle drop-off areas should be a minimum of 9000 mm in length, have a minimum width of 3600 mm and be served by a kerb ramp.

h. At least one accessible route {see (e)} marked by tactile pavers leading to an accessible entrance of the building shall be provided from the alighting and boarding point of taxi stands and car park lots for people with disabilities.

11.4.3 **Tactile Ground Surface Indicators (TGSI): Tactile Guiding and Warning Blocks:** Tactile ground surface indicators or tactile guiding and warning tiles/blocks aid blind and vision impaired pedestrians negotiate the built environment shall be provided as per NBC norms in force.

Tactile guiding blocks indicate a correct path/ route to follow for a person with visual impairment. It is mandatory to install one/two rows of tactile guiding blocks along the entire length of the proposed accessible route. Care shall be taken to ensure that there

are no obstacles, such as trees, poles or uneven surfaces, along the route traversed by the guiding blocks. Also, there shall be clear headroom of at least 2100 mm height above the tactile guiding blocks, free of protruding objects such as overhanging tree branches and signage, along the entire length of the walk.

Tactile warning blocks indicate an approaching potential hazard or a change in direction of the walkway, and serve as a warning of the approaching danger to persons with visual impairments, preparing them to tread cautiously and expect obstacles along the travel path, traffic intersections, doorways, etc. They are used to screen off obstacles, drop-offs or other hazards, to discourage movement in an incorrect direction, and to warn of a corner or junction. Two rows of tactile warning tiles shall be installed across the entire width of the designated accessible pathway, before intersections, building entrances, level changes, obstacles such as trees, and each time the walkway changes direction.

Warning blocks shall be placed 300 mm from the beginning and end of the ramps and stairs, at landings and entrance to any door.

#### 11.4.3.1 Places to Install TGSI

TGSI shall be installed at following places:

a) In open space to orient persons with vision impairment;

b) In front of an area where traffic is present;

c) In front of an entrance/exit to and from a ramp, staircase or multi-level crossing facility;

d) Entrances/exits at public transport terminals or boarding areas;

e) Sidewalk/footpath section of an approach road to a building; and f) From a public facility to the nearest public transport station.

#### 11.4.3.2 Barriers and Hazards

Obstacles, such as objects or signs mounted on walls, columns or free-standing supports along the walking path shall be avoided. Unavoidable free standing posts or columns within access routes on pathways shall leave at least unobstructed walking width of 1000 mm and be clearly marked with visual indicators. Visual indicators at least 75 mm in height with a minimum visual contrast of 30 points difference in the LRV value of the colours to the background shall be placed; one at a height between 800 mm and 1000 mm above floor level, and the other between 1400 mm and 1600 mm above floor level.

Bollards, short vertical posts generally arranged in a line to guide traffic and protect from vehicle intrusions, shall have a maximum height of 1000 mm. Bollards,where installed within the access route shall have a minimum clear spacing between them of 1000 mm so as to provide clear passage width for movement of wheelchairs.

#### 11.4.3.3 Protruding Objects

Unavoidable protruding objects shall not reduce the minimum clear width of an accessible route or maneuvering space. Protruding objects in the access route shall contrast visually with the background environment.

Objects with a height lower than 1000 mm can create a hazard for blind or partially sighted people. Permanent equipment that cannot be located outside the boundaries of a path shall be,

a) designed to be easily seen with a minimum difference in LRVs of 30 points to the background;

b) shielded to protect against impact;

c) accompanied by a feature that warns of the presence of a potential hazard and is detectable for a person using a white cane or stick;

d) the headroom along a path shall be maintained at a height of not less than 2100 mm above the surface of the path.

e) Any objects projecting more than 100 mm between 300 mm and 2100 mm above ground level into an access route shall be clearly visible and detectable with a cane.

When a projecting obstacle exists, a protective guard shall be provided at ground level, under the projecting object, such as, a kerb or fixed element at a height of 100 mm-300 mm as cane detection. Cane detection shall not be set back more than 100 mm from the face of the projecting object. Wing walls, side partitions, alcoves or recesses are solutions for projecting elements where free space under the object is needed. Winged protection shall extend continuously between 300 mm and 1000 mm above the floor and shall contrast visually with the background.

## 11.5 Building Requirements

The specified facilities for the buildings for persons with disabilitiesshall be as follows:

### 11.5.1 Approach to Plinth Level

Every building should have at least one entrance accessible to the **persons with disabilitiesand** shall be indicated by proper signage. This entrance shall be approached through a ramp together with the stepped entry.

a. Ramped approach:Ramp shall be finished with non-slip material to enter the building. Minimum width of ramp shall be 1.8 m. The landing shall have a level platform of not less than 1.5m. For minimum specification for Ramps see Table 11.1.

Table 11.1 : Minimum Specifications for Ramps

| Level difference | Minimum gradient of Ramp | Ramp Width | Handrail on both sides | Comments |
|---|---|---|---|---|
| ≥ 150 mm ≤ 300 mm | 1:12 | 1200 mm | √ | |
| ≥ 300 mm ≤ 750 mm | 1:12 | 1500 mm | √ | Landings every 5 meters of ramp run. |
| ≥ 750 mm ≤ 3000mm | 1:15 | 1800 mm | √ | Landings every 9 meters of ramp run. |
| ≥ 3000 mm | 1:20 | 1800 mm | √ | Landings every 9 meters of ramp run. |

*Note : A ramp run with a vertical rise greater than 150 mm should have handrails that*

- *are on both sides*
- *are placed at a height as per 11.5.3.*

- *handrails must be continuous on both sides & even at landings and end of handrails to be rounded off or grounded in the ground.*

b. Stepped Approach: For stepped approach size of tread shall not be less than 300mm and maximum riser shall be 150mm. Provision of hand rail on both sides of the stepped approach similar to the ramped approach.

c. Accessible Exit/Entrance Door: Minimum& clear opening of the accessible entrance door shall be 900mm and it shall not be provided with a step that obstructs the passage of a wheel chair user. Threshold shall not be raised more than 10 mm. The width of the corridors or passageways leading to and from such access door shall not be less than 1500 mm. In multi-storey buildings, the accessible entrance shall have an accessible route leading to the lifts {See 11.4.2 (e)}. All external doors shall have warning blocks installed 300 mm before the entrances for aid of visually impaired users.

*Note: For Details of Doors, Windows, Operational Control and devices and other building requirements, Signages, Escalators etc. the standards specified in NBC Chapter 3 - Clause 13 Requirements for accessibility inBuilt environment for elders and persons with disabilities andAnnex B: Anthropometrics and Requirements for Accessibility in Built-Environment for Elders and Persons with Disabilities shall have to be followed as amended from time to time.*

d. **Entrance Landing:** Entrance landing shall be provided adjacent to ramp with the minimum dimension 1.8 m x2.0 m. The entrance landing that adjoins the top end of a slope shall be provided with floor materials to attract the attention of visually impaired person's (limited to coloured floor material whose colour and brightness is conspicuously different from that of the surrounding floor material or the material that emits different sound to guide visually impaired persons. Finishes shall have a non-slip surface with a texture traversable by a wheel chair. Curbs wherever provided should blend to a common level.

### 11.5.2 Corridor Connecting the Entrance/Exit for persons with disabilities.

The corridor connecting the entrance / exit for persons with disabilitiesleading directly outdoors to a place where information concerning the overall use of the specified building can be provided to visually impaired persons either by a person or by signs, shall be provided as follows:

a. Guiding floor materials' shall be provided or device that emits sound to guide visually impaired persons.

b. The minimum width shall be 1.5 m.

c. In case there is a difference of level, slope ways shall be provided as specified in Table 11.1.

d. Handrails shall be provided for ramps/slope ways as per Handrails and Grab Bars (refer 11.5.3). The balusters/ railing shall not reduce the width of corridor.

### 11.5.3 Handrails and Grab Bars

**For stepped path, stairs and ramps, handrails shall meet the following requirements:**

a) They shall be provided on both the sides;

b) They shall be continuous, even at the landings;

c) They shall extend at least 300 mm beyond the first and last nosing. A handrail shall not project into a transverse circulation path unless it is continuous and intended to formpart of the guidance along that path. The endof the horizontal extension should be turnedtowards the wall on the closed side of the ramp or stairs, or be turned down and terminate at the floor or ground level.

d) They shall have aminimum clear spaceof 50 mm from the walls;

e) The height to the top of a handrail shall be 900 mm above the surface of a ramp, the pitch line of a stair, and the surface of a landing. A second handrail, with a lower profile than the first one, shall be provided. The height to the top of the second handrail shall be 760 mm above the surface of a ramp, the pitch line of a stair, and the surface of a landing. There shall be sufficient distance between the two handrails (say, 100 mm).

f) In case the handrail is enclosed in a recess, the recess shall be 50mm deep.

11.5.3.1 **Handrails** shall

a) be securely fixed and rigid; the fastenings and the materials shall be able to withstand a minimum point load, both vertical and horizontal of 1.7 KN;

b) be slip-resistant with round ends;

c) have a circular section of 38mm in diameter;

d) be free of any sharp or abrasive elements;

e) have continuous gripping surfaces, without interruptions or obstructions that may break a hand hold;
f) contrast with the wall behind;

g) shall be provided with Braille/tactile markings at the beginning and at the end to give information to people with visual impairment.

11.5.3.2 Grab Bars shall,

a) be securely fixed and rigid;

b) be slip-resistant with round ends;

c) Preferably have knurled surfaces;

d) have a circular section of 38mm in diameter;

e) be free of any sharp or abrasive elements;

f) have a minimum clear space of 50 mm to 65 mm from the wall;

g) be installed at a height of 760 mm to 900 mm;

h) be able to bear a weight of 1.7 kN;

i) contrast with the wall/surface behind.

## 11.6 Stair-ways

One of the stair-ways - near the entrance / exit for the persons with disabilitiesshall have the following provisions:

a. The minimum width shall be 1.5 m.

b. Height of the riser shall not be more than 150mm and width of the tread 300mm. The steps shall not have abrupt (square) nosing.

c. Maximum number of risers on a flight shall be limited to 12.

d. For Handrails and Grab Bars refer 11.5.3. The balusters/ railing shall not reduce the width of staircase.

e. The stairs landing shall be minimum 1.5 m deep.

f. Projecting nosing and open stairs shall not be provided to minimize the risk of stumbling.

g. No appliances, fixtures or fittings shall project beyond 90 mm from the surface of any wall in a staircase below a level of 2100 mm, measured above the treads of the staircase. If such a projection is unavoidable, the same shall also be extended downwards to the level of the treads. However, in no case the width of the staircase shall be less than that prescribed in these bye-laws.

## 11.7 Lifts

Wherever lift is required as per bye-laws, provision of at least one lift shall be made for the wheel chair user with the following cage dimensions of lift recommended for passenger lift of 13 person's capacity of Bureau of Indian Standards.

Table no 11.2- Desirable Lift size

| | |
|---|---|
| Clear Internal width (minimum) | 1.5 m min. |
| Clear Internal depth (minimum) | 1.5 m min. |
| Entrance door width | 0.9 m min. |

a. A hand rail at height of 760mm and for other detailsrefer 11.5.3.

b. The lift lobby shall be of an inside measurement of 1.8 m x 1.8 m or more.

c. The time of an automatically closing door should be minimum 5 seconds and the closing speed should not exceed 0.25 m/ sec.

d. The interior of the cage shall be provided with a device that audibly indicates the floor, the cage has reached indicates that the door of the cage of entrance/exit is either open or closed.

## 11.8 Toilet Rooms and Sanitary Rooms

Public toilets shall comply with the overall requirements under these provisions with respect to the facilities provided therein so as to ensure that the same are accessible. In all public toilets, the following shall be provided:

a) Male section shall have one urinal with support grab bars for ambulant disabled and at least one urinal for children at a lower height of 430mm;

b) Both male and female section shall have one WC for ambulant disabled;

c) One Type A unisex accessible toilet room with independent entrance; and

d) Depending on footfall, one Type B accessible toilet in both male and female toilet groups.

Sanitary facilities shall be designed to accommodate a variety of users. Accessible toilets that can be used by both sexes (unisex accessible toilets) allow the greatest flexibility for people who require assistance hence is the preferred option. Wheelchair accessible unisex toilets should always be provided in addition to wheelchair accessible separate sex toilets. Similarly, a provision of an enlarged cubicle for ambulant disabled people in a separate sex toilet room can also benefit parents with children and people who need an enlarged space (for example those with luggage).

The accessible toilet room shall be located as close as possible to the existing toilet block/near the entrance/reception/waiting area/common area/stilts etc. and should be easy to find. It should not be so located that it compromises the privacy of users.

In new designs, it is preferable that the sequence of Ladies, Gents and Accessible toilets be arranged in perpendicular to the movement corridor to achieve privacy for the persons with disabilities.

If only one toilet is decided to be provided considering the estimated requirement as per this Code, it shall be Type A unisex accessible toilet.

Where, more than one accessible toilet is provided, different options exist.

11.8.1 **Where sanitary facilities are provided, the following shall also apply:**

a) At least one unisex wheelchair user accessible toilet room of Type A, with corner placement of WC, shall be provided, which shall always contain a washbasin.

b) One accessible toilet (Type A or Type B) in single sex toilet block (male and female section of toilet block) shall be provided depending on the footfall and space.

c) When more than one accessible corner toilet of Type B is planned, a choice of layouts suitable for left hand and right hand transfer shall be provided. In case such toilets are located in similar position on each floor of a multi-storey building, it should allow for right and left hand transfer on alternate floors.

In any case, a unisex accessible toilet of Type A shall be provided on the ground floor so as to be able to meet the need for both left and right side transfers.

d) In all separate sex toilet/sanitary rooms there shall be provision for one cubicle suitable for use by ambulant disabled.

e) Where urinals are provided, there shall be urinals for wheelchair users and ambulant disabled people.

f) Where there is requirement for only one toilet or sanitary room in a building, a wheelchair accessible unisex toilet of Type A shall be provided with minimum size of 2 m x 2.2 m to accommodate a standing height washbasin. No urinal should be provided in unisex accessible toilet.

g) The provision of the accessible toilets shall be such that any wheelchair user/ambulant disabled person does not have to travel more than 30 m on the same floor.

h) The design of toilet facilities shall incorporate ease of use for all people and location of fittings should follow a logical sequence.

i) Care shall be taken in placing mirrors and lights to avoid confusion and dazzling for visually impaired users.

j) Soap dispensers and hand towels or driers shall be placed at height of 800mm max. so that they are easy to locate, identify and use.

k) Visual contrast and lighting, emergency assistance alarm, as per NBC in force.

l) Many persons with visual impairments find it convenient to use the toilets where internal dimensions, accessories and fixtures placement are standardized. A tactile layout of the toilet should be provided on the wall, near the latch side at 900 mm height.

m) A distinct audio sound (beeper/clapper) can be installed above the entrance door for the identification of the toilets by persons with visual impairments.

n). If facilities are provided such as buttons or taps which operate by use of sensors, accessible signage shall be provided to explain the same. For the benefit of the persons with vision impairments, all general toilets shall have signage marked on plates with raised alphabets and Braille put on the wall next to the door latch, preferably on the left side. An additional signage shall also be provided on the door at 1500 mm height.

### 11.8.2 Type A Toilet Room with Lateral Transfer from Both Sides.

#### 11.8.2.1 Type A accessible toilet room shall meet the following requirements:

a) It shall have minimum internal dimensions 2200 mm × 2000 mm.

b) The layout of the fixtures in the toilet shall be such that there is a clear manoeuvring space that provides a wheelchair turning radius of 1800 mm in front of the water-closet and washbasin in the accessible toilet unit.

c) It shall have all fixtures and utilities arranged in a manner to provide a clear space of 1500 mm × 1500 mm for wheelchair users to access them.

d) It shall have clear space of not less than 900 mm wide next to the water-closet.

e) It shall be equipped with a door not less than 900 mm wide clear opening leaving the door frame.

f) It shall have a water-closet, grab bars, and washbasin, essential washroom accessories, an alarm to seek emergency help,complying with NBC in force.

g) It shall have the toilet roll dispenser and hand water faucet mounted below the grab bars and at not more than 300 mm from the front edge of the seat and at a height between 50 mm and 200 mm from the top of the water- closet seat.

h) Cloth hooks should be set at different heights, 800 mm to 1000 mm, and additionally at least one hook at 1400 mm; and projecting not more than 40 mm from the wall.

i) Where possible, be equipped with a shelf of dimensions 400 mm × 200 mm fixed at a height of between 800 mm and 1000 mm from the floor.

### 11.8.3 Type B Toilet Room with Lateral Transfer from One Side Only.

**Type B toilet has the following characteristics:**

a) Lateral transfer only from one side having minimum internal dimensions of 2200 mm × 2000 mm.;

b) Manoeuvring space reduced by washbasin;

c) Independent water supply beside water-closet, with floor drain where necessary;

d) Ability to reach small wash hand basin when seated on toilet;

e) Horizontal grab rail on wall beside the water-closet; f) Vertical grab rail on wall beside the water-closet for getting up and sitting down (slanted grab bars are not preferred);

g) Foldable U shape grab bar; and

h) Toilet paper dispenser fixed on the wall beside the water-closet.

### 11.8.4 Grab Bars for Toilet Rooms and Sanitary Rooms:

a. Grab bars as per NBC norm in force shall be provided in toilet or sanitary rooms in accordance with this clause.

b. On both sides of a toilet, a grab bar (whether drop-down or fixed to the wall) shall be provided at a distance between 350 mm and 500 mm from the centre line of the toilet.

c. On the sides where a lateral transfer is possible, a foldable grab bar (drop-down support bar) shall be provided at a height of 200 mm to 300 mm above the water-closet.

d. The length of the foldable grab bar should overlap the front edge of the water-closet in between 100 mm and 250 mm. The positioning of a foldable grab bar should allow access from a wheelchair when folded up.

e. Where a wall is beside the toilet, L-shape grab bar (size 700mm length and 700mm height) shall be provided at a height of 200 mm to 300 mm above the water-closet,

f. The grab bar shall extend a distance of minimum 150 mm to the front edge of the water-closet.

g. The positioning of accessories such as hand towel, soap, waste bin, etc, should not hamper the use of the grab bar.

h. The grab bar height for toilets for children should be between 510 mm and 635 mm.

## 11.9 Designing for Children

In buildings meant for pre-dominant use of children, it will be necessary to suitably alter the height of the handrail and other fittings & fixtures, etc.

***Note:*** *Guiding / Warning Floor Material: The floor material to guide or to warn the visually impaired persons with a change of colour or material texture and easily distinguishable from the rest of the surrounding floor materials. The material with different texture gives audible signals with sensory warning when a person moves on this surface with walking stick. The guiding/warning floor material is meant to give the directional effect or warn a person at critical places. It should be provided in the following areas:*

*a. The access path to the building and to the parking area.*

*b. The landing lobby towards the information board, reception, lifts, staircases and toilets*

*c. Immediately at the beginning/end of walkway where there is a vehicular traffic.*

*d. At the location abruptly changing in level or beginning/end of a ramp.*

*e. Immediately in front of an entrance/exit and the landing.*

## 11.10 Drinking Water:

Suitable provision of drinking water shall be made for the persons with disabilitiesnear the special toilet provided for them.

## 11.11 Refuge

An alternative to immediate evacuation of a building via staircases and/ or lifts for the movement of persons with disabilitiesto areas of safety within a building. If possible, they could remain there until the fire is controlled and extinguished or until rescued by the fire fighters.

a. It is useful to have the provisions of a refuge area, usually at the fire protected stair landing on each floor that can safely hold one or two wheelchairs.

b. Hand Doorways with clear opening width of 0.9 m and complying with section 4.6 and

c. Have an alarm switch installed between 300mm and 900mm from floor level.

d. All stairs next to the refuge shall be with a clear width of 1500mm between the handrails.

## 11.12 Signage

a. Appropriate identification of specific facilities within a building for the persons with disabilitiesshould be done with proper signals.

b. Signs should be designed and located so that they are easily legible by using suitable letter size (not less than 20 mm high).

c. For visually impaired persons, information board in brail should be installed on the wall at a suitable height and it should be possible to approach them closely.

d. To ensure safe walking, there should not be any protruding sign which creates obstruction in walking.

e. Public Address System shallalso be provided in busy public areas.

f. The symbols/information should be in contrasting colour and properly illuminated because people with limited vision shallbe able to differentiate amongst primary colours.

g. International Symbol Mark for wheel chair be installed in a lift, toilet, staircase, parking areas, etc., that have been provided for the differently abled.

## 11.13 AUDITORIUMS, CONCERT HALLS, SPORTS ARENAS AND SIMILAR SEATING

### 11.13.1 Designated Seating Areas for Wheelchair Users:

At least 1 percent of seats shall be designated as seating areas for wheelchairs users, with a minimum of two. For total seats exceeding 51, it is recommended to provide the designated seating areas in the following manner:

a) Total seats 51 to 100, minimum three designated seating areas for wheelchair users;

b) Total seats 101 to 200, minimum four designated seating areas for wheelchair users;

c) One additional seating area should be provided for every two hundred additional seats or part thereof.

These spaces should be integrated among other seats and allow two wheelchair users to stay together. It is recommended that the armrest on the seats at the end of the row lift up to allow people to transfer from the wheelchair onto a seat. To accommodate groups of wheelchair users, in an auditorium with fixed seats, a minimum of 15 seats shall be foldable or removable to increase the number of designated areas for wheelchair users when necessary.

Some seats should be wider in order to allow larger size people to sit properly.

### 11.13.2 Accessible Changing Rooms

The minimum number of accessible changing rooms should be provided depending on the type and use ofthe building. In the event that changing rooms are provided alongside a toilet area, these should comply with the specifications as per NBC in force.

a. A fixed bench should be set at a height of 450 mm to 480 mm above floor level. The bench should be no less than 500 mm wide, 2 000 mm in length, and be provided with a grab bar at a height of 700 mm to 800 mm with a clearance of between 50 mm and 65 mm from the wall.

b. A clear space of 1 500 mm × 1 500 mm shall be left beside the bench.

c. Coat hooks should be set at different heights, 800 mm to 1000 mm, and additionally at least one hook at 1400 mm.

d. Coat hooks, benches, locker handles and other furnishings should offer good colour and tonal contrast to their backgrounds. Non-slip floor surfaces should be used, and good lighting as well as matte finished surfaces and furnishings should be provided.

e. An alarm/call bell/switch shall be provided as per NBC in force.

f. Changing rooms shall have a minimum area of 4 sq.m.

### 11.13.3. **Viewing Spaces In Assembly Areas : Floor Area**

The floor area for a wheelchair viewing space shall be connected to an accessible path of travel and shall meet the following requirements :

a) It shall be at least 900 mm × 1400 mm;

b) The depth of the row shall be minimum 2400 mm;

c) It shall have clear and level surface;

d) It shall have sufficient manoeuvring space;

e) Spaces for several wheelchair users shall be provided. They shall be located beside regular seating rows, for the wheelchair user to be able to stay by his/her accompanying person, if relevant;

f) It is recommended that the armrest on the seats at the end of the row (aisle seats) lift up to allow wheelchair users to transfer from the wheelchair onto a seat.

Some seats should be provided with foldable armrests, considering transferences; some other seats should be wider, considering larger size people.

# Chapter 12

## "SWACCH DELHI"- Provisions for Public Washroom Complexes

12.1 In order to ensure that public toilets/ wash rooms are built in various parts of the city, plot owners of the plots having an area of 3000 sq. m or more shall compulsorily construct public washroom complexes within their plots. This is in addition to the mandatory sanitary requirements. It is optional for Residential Plotted Development.

12.2 All complexes (public toilets/ wash rooms, ATM, Guard Room) should be constructed mainly in the setback area within the plots, provided they do not obstruct the firefighting path. These complexes shall follow the Provisions for Universal Designs for Persons with Disabilities, Elderly and Children.

12.3 All complexes should have single storey, with a maximum floor to ceiling height of 2.8 m and water tanks concealed with a parapet wall / jali not exceeding 1 m. in height.

12.4 All complexes should at least have 1 wash basin, 2 urinals and 1 WC each, for men and women separately, with adequate electricity, drainage, water and sewerage facilities and connected to the prevalent infrastructure network. The complex shall be well ventilated with adequate provisions for lighting. Provision of Solar power shall be made for utilization in lighting of the complex.

12.5 In such complexes, Bank ATM (up to a maximum area of 9.0 sqm only), Public washroom, Security Room/Guard Room shall be permitted in the setback area - for usage of general public, provided it does not obstruct fire vehicles movement. *(refer 2.0.1.d- xiv).*

12.6 Both the Public Washroom Complex and the ATM should have direct access from outside the plot i.e. direct access from the road, so as to permit usage by the general public.

12.7 Such complexes will be free of FAR and Ground Coverage and will form part of full schemes prepared by owner/ architect for approval. The complex plan will be same as adopted by Delhi Urban Art Commission.

12.8 Such complexes shall have provisions for outdoor signage, advertisements and space for public art with permission from the concerned agencies/local authorities.

12.9 Complexes shall be either be constructed and maintained by the plot owner or constructed by the plot owner and maintained by a service provider or constructed as well as maintained by a service provider.

12.10 Such complexes are not permitted to be used for purposes other than specified above.

12.11 In case of addition of such complexes in existing premise/s, shall require fire clearances and incorporation of the same in the approved layout plan by the concerned local authorities. In such cases, the approval of DUAC is not required.

# Chapater 13

## Provisions for Public Art

13.1 In all types of building/s which require approval of Delhi Urban Art Commission, works of art shall be provided.

13.2 Public art constitutes outdoor sculptures, outdoor installations, murals and frescos, mobiles and bas-relief, folk and tribal art, artisan craft, indoor sculptures, wall paintings, indoor installations and other art forms relevant to the habitat.

13.3 Public art can be made of any material and have any color and texture.

13.4 The extent of public art (measured in terms of cost) should be at least 1 percent of the cost of construction of the structure as per prevailing CPWD rates.

13.5 Public art can be located either within the plot boundary or within the building.

13.6 If provided within the plot boundary, the public art piece or pieces should be so located in the public areas/ open spaces / setback areas so as not to interfere with the movement of the fire tender.

13.7 If provided within the building, the public art piece or pieces may be provided preferably in the lobby areas where it is visible to the public.

13.8 If provided on the building, public art may be in the form of murals, frescos etc. on either inner or outer walls.

13.9 No piece of public art shall be more than 2 m in height, if located within the building and 5 m in height if located outside the building.

13.10 Public art work shall be incorporated in the building sanction plans for scrutiny by Delhi Urban Art Commission.

13.11 Delhi Urban Art Commission can issue guidelines on public art from time to time and the same shall be followed.

**See Annexure XI**

| INDEX OF FORMS | | |
|---|---|---|
| **Form** | **Title** | **Signatory** (Digital Signature of) |
| COMMON APPLICATION FORM | Application To Erect, Re-Erect, Demolish, or To Make Material Alteration in a Building as per Design and Specifications. | (i) Architect/ Engineer/ Supervisor (Responsible for Architectural Design)<br>(ii) Structural Engineer (Responsible for Structural Design)<br>(iii) Supervisor (Responsible for supervision of the construction)<br>(iv) Owner |
| | Certificate of Appointment of Professionals (Architect/ Engineer/ Structural Engineer/Supervisor) | |
| | Certificate of Structural Safety. | |
| | Certificate for Supervision, No Nuisance and Debris Removal | |
| | Indemnity for Basement. | |
| B-1 | Grant/ Refusal of Sanction | Sanctioning Authority |
| B-2 | Grant/ Refusal of Revalidation | Sanctioning Authority |
| C-1 | Intimation of completion of work up to plinth level for moderate and high risk buildings | Architect/Engineer/Supervisor & Owner |
| C-2 | Inspection Report Up To Plinth Level By The Office of The Sanctioning Authority for Moderate and High risk buildings/ by the Architect/Engineer/Supervisor for Very Low and Low Risk buildings | Sanctioning Authority for Moderate and High Risk category<br><br>Architect/Engineer/Supervisor for Very Low and Low Risk category |
| COMMON OCCUPANCY-CUM-COMPLETION REQUEST FORM | Intimation Of Building Completion | (i) Architect/ Engineer/ Supervisor (Responsible for Architectural Design)<br>(ii) Structural Engineer (Responsible for Structural Design)<br>(iii) Supervisor (Responsible for supervision of the construction)<br>(iv) Owner |
| | Declaration Proforma<br>Certificate of Structural Safety | |
| D-1 | Occupancy-cum-Completion Certificate/ Part Occupancy-cum-Completion Certificate | Sanctioning Authority |
| D-2 | Rejection of Compliance In Respect of Occupancy Certificate | Sanctioning Authority |
| D-3 | Regulersation Certificate | Sanctioning Authority |

# COMMON APPLICATION FORM

***(Chapter 2, 2.1.3)***

## APPLICATION TO ERECT, RE-ERECT, DEMOLISH, OR TO MAKE MATERIAL ALTERATION IN A BUILDING AS PER DESIGN AND SPECIFICATIONS

(To Be Submitted By the Owner)

To

The _____

New Delhi.

Madam/ Sir,

I/ We hereby give notice that I/ We intend to erect/re-erect/ alter the Building No_____ on/in plot No_____ Block No_____ House No_____situated at_____Scheme_____and in accordance with the building Bye-laws of Delhi, and I forward herewith the following plans and specifications duly signed by me and_____ (name of Architect/ Empaneled Engineer), Architect's Registration /Engineer Empanelment No_____and Structural Engineer…… and Supervisor …… who has prepared the plans, designs etc. and a copy of other statements/documents (as applicable).

The Latent Defects Liability Insurance Policy shall be taken as per sub-clause 2.10 of UBBL 2016.

Encl:

1. Plans and Drawings (Chapter2, 2.1.1)
2. Ownership Documents. (Chapter 2, 2.1.2)
3. Declaration Proforma (Chapter 2, 2.1.3)
4. a. Tentative Date of Start of Work.

   b. Tentative Date of Completion of Work.
5. a. For Existing Connection of DJB: Connection Number.

   b. For Fresh Connection from DJB: Apply on COCCRF of Online Building Permit System.
6. Services Plan, as applicable (Chapter 9, sub-clause 9.4.6)

The construction shall be carried out in accordance with the sanctioned building plan. The Owner/ Supervisor (supervising the construction) shall be responsible for any lapse on their part for such construction.

*Note: i) There is no requirement of submission of Affidavit(s)/ Notorised Affidavit(s)/ e-stamp paper(s)/ Bond(s) etc along with this application form.*

*ii) There is no requirement of submission of Notice of Commencement of Work to the concerned office/s of SanctioningAuthority.*

# DECLARATION PROFORMA

## CERTIFICATE OF APPOINTMENT OF PROFESSIONALS

## (Architect/ Engineer/ Supervisor)

## ARCHITECT/ ENGINEER/SUPERVISOR

(To be submitted by Architect/ Engineer/Supervisor)

***(Chapter 2, Para 2.1.3)***

I/ We, ----------, S/o, W/o, D/o Shri ----------occupation Architect/ Engineer/ Supervisor, office at ---------- do hereby declare as under:

1) That I am an Architect by profession and duly registered with Council of Architecture vide registration no_____.

   Or

   That I am an Engineer by profession and duly as per competency under these bye-laws, in the sanctioning authority.

   Or

   That I am a Supervisor by profession and duly as per competency under these bye-laws, in the sanctioning authority.

2) That I have been appointed as an Architect/ Engineer/Supervisor for preparing the architectural design of building as per Common Application Form.

3) That in case the owner dispenses with my services at any stage whatsoever; I shall inform the sanctioning authority body within 7 days along with the photograph of the building showing the level/status of the building.

4) That in case I (Architect/ Engineer/Supervisor) decide not to continue further with project, then I shall inform the same to the sanctioning authority within 7 days with copy to the owner.

5) That in respect of Public buildings, infrastructure etc. all the prescribed barrier free movement and accessibility features as prescribed in UBBL 2016 -Chapter 11 –'Provisions for Universal Design for Persons with Disabilities, Elderly and Children'; have been incorporated in the Building plan/s.

# STRUCTURAL ENGINEER

***(Chapter2, Para 2.1.3)***

(To be submitted by Structural Engineer)

I/ We, ----------, S/o, W/o, D/o Shri ----------occupation Structural Engineer, office at ---------- do hereby solemnly affirm and declare as under:

1) That I am a Structural Engineer by profession as per competency under these bye-laws..

2) That I have been appointed as a Structural Engineer for preparing the structural design of building as per Common Application Form

3) That in case the owner dispenses with my services at any stage whatsoever; I shall inform the sanctioning authority within 7 days along with the photograph of the building showing the level/status of the building.

4) That in case I (Structural Engineer) decide not to continue further with project, then I shall inform the same to the sanctioning authority within 7 days with copy to the owner.

5) I undertake the following Certificate for Structural Safety as per (Chapter 2, Para 2.1.3, 2.1.4 of UBBL 2016)

I. Certified that the building plans submitted to the sanctioning authority shall be/has been designed for safety requirements.

II. It is also certified that the structural design shall be/was based on National Building Code, including safety from natural hazards, based on soil conditions (as per Soil Testing Report no….. dated …. prepared by ……..) will be/has been taken into consideration and would be/has been duly incorporated in structural drawings of the building to be/so constructed.

a. Encl: Soil Testing Report in case of High Risk Building.

## SUPERVISOR

***(Chapter 2, Para 2.1.3)***

(To be submitted by Architect/Engineer/Supervisor)

I/ We, ----------, S/o, W/o, D/o Shri ----------occupation Supervisor, office at ---------- do hereby solemnly affirm and declare as under:

1) That I am an Architect/Engineer/Supervisor by profession as per competency under these bye-laws.

2) That I have been appointed as an Architect/Engineer/Supervisor for supervising the construction of building as per Common Application Form.

3) That in case the owner dispenses with my services at any stage whatsoever; I shall inform the sanctioning authority within 7 days along with the photograph of the building showing the level/status of the building.

4) That in case I (Architect/Engineer/Supervisor) decide not to continue further with project, then I shall inform the same to the sanctioning authority within 7 days with copy to the owner.

## CERTIFICATE OF STRUCTURAL SAFETY

***(Chapter 2, Para 2.1.3. & 2.1.4)***

(To be submitted by Structural Engineer)

The following certificate is submitted along with the building plans drawing while submitting the plans for obtaining sanction of building permit/occupancy-cum-completion for Building No. _____ on Plot no. _____ situated at _____ Scheme _____.

1) Certified that the building plans submitted to the sanctioning authority shall be/has been designed for safety requirements.

2) It is also certified that the structural design shall be/was based on National Building Code, including safety from natural hazards, based on soil conditions (as per Soil Testing Report no….. dated …. prepared by ……..) will be/has been taken into consideration and would be/has been duly incorporated in structural drawings of the building to be/so constructed.

Encl: Soil Testing Report in case of High Risk Building.

# CERTIFICATE FOR SUPERVISION,

## NO NUISANCE AND DEBRIS REMOVAL

***(Chapter 2, Para 2.1.3)***

(To be submitted by Architect/**Engineer/Project Manager/Structural Engineer/Supervisor)**

1. Certified that erection / re-erection, demolition or material alternation in and the drainage / sanitary work shall be carried out/ executed by me under my supervision / of Building No. _____on /in Plot and I/ We certify that all the materials (type and grade) and workmanship of the work shall be in accordance with the specifications submitted along with the work, and shall be carried out according to structural design approved in sanctioned plans and which also includes the services like drainage, sanitary, water supply, electrical and fire safety no non-Compounding deviations shall be carried out during the course of construction.

2. Certified that the Debris during the construction will be removed on weekly basis. If the same is not done, in that case local body shall remove the mulba/Debris and the cost with penalty be recovered from me/us.

3. Certified that during construction I/we shall properly screen the construction site off the main road by means of erecting a screen wall not less than 8 feet, in height from the ground level which shall be painted to avoid unpleasant look from the road side. In addition to this, a net or some other protective material shall be hoisted at the façade of the building to ensure that any falling material remains within this protected area.

4. Certified that noise related activities would not be taken up for construction at night during 10 P.M to 6 A.M.

# INDEMNITY FOR BASEMENT

***(Chapter 2, Para 2.1.3)***

(To be submitted by Owner)

HEREBY WITNESSEETH AS FOLLOWS:

WHEREAS the OWNER(S) have submitted the plan of basement & whereas the owners have represented to the sanctioning authority and if sanction is granted for the construction of the said basement the owners shall indemnify sanctioning authority of any loss at the time of digging of foundation of the said basement or in the course of construction of the basement or even thereafter,

AND

WHEREAS the OWNER(S) have further agreed to indemnify sanctioning authority for any claims put up against the sanctioning authority body either by way of damage, compensation or in any other way in case the sanctioning authority is required to pay any such amount to any person or the owner or owners of the adjoining properties. The owners hereby agree and undertake to indemnify sanctioning authority to pay the full extent of the amount the sanctioning authority may require to pay to the extent hereinabove mentioned, AND

WHEREAS the OWNER(S) further undertake and agreed to indemnity the sanctioning authority for any such amount sanctioning authority may require to pay either by way compensation or damage or any other amount and further undertake to indemnity the Authority/ concerned local body of all cost and expenses that the sanctioning authority may require to defend such action in any court of law. The owners undertaking that no excavation shall be carried out beyond permissible boundaries of plot. Any damage occurring during or due to excavation made at site to public sewer, water drains shall have to be made good by the OWNER(S). THEREFORE,

WHEREBY, in consideration of the above, an undertaking and indemnity is hereby given by the OWNER(S) to the sanctioning authority and the sanctioning authority in this behalf grant sanction of the building alongwith basement to the said OWNER(S).

A) Digital Signature of the Owner

B) Digital Signature of Structural Engineer (Responsible for Structural Design)

C) Digital Signature of Architect/ Engineer/ Supervisor (Responsible for Architectural Design)

D) Digital Signature of the Supervisor (Responsible for supervision of the construction)

# FORM- B-1

(Chapter 2, Para 2.3)

GRANT/ REFUSAL OF SANCTION

(New Construction/ Revised Sanction/Alteration/Addition)

NAME OF THE SANCTIONING AUTHORITY _____

File No. _____ Dated_____

To,

---

**GRANT OF SANCTION**

Dear Sir/Madam,

**Sub: Sanction under Section 12 and Section 13 of the Delhi Development Act 1957**

Dear Sir/Madam

With reference to your application dated …… for the grant of sanction to erect/ re-erect/add to/alteration in the building to carry out the development specified in the said application relating to Plot No. ……. Pocket No. ……. Block No. …… Sector No. ……. Situated in/at ……. I have to state that the same has been sanctioned on …… by the DDA subject to the following conditions and corrections made on the plans:-

1. The plans are valid up to …… day of month …… year …….
2. It will be duty of the owner of the plot and the Architect preparing the plan to ensure that the sanctioned plans are constructed as per prevalent building bye-laws.
3. All the provisions of the UBBL 2016 shall have to be followed. Violation of building bye-laws will not be compounded.
4. The construction will be undertaken as per sanctioned plan only and no deviation from the bye-laws will be permitted without prior sanction. Any deviation done against the bye-laws is liable to be demolished and the sanctioned plan may be revoked. The Architect, Engineer, Supervisor engaged on the job will run the risk of having his/her license cancelled. In case of rectification, the same shall have to be done at the cost of the owner and the sanctioning authority shall stand indemnified against any claim on this account.
5. The party shall not occupy or permit it to occupy the building or use permit the building or part there of affected by any such work until occupancy certificate is issued by the Sanctioning Authority.

6. DDA will stand indemnified and kept harmless from all proceedings in courts and before other authorities of all expenses/ losses/claims which the DDA may incur or become liable to pay as a result or in consequences of the sanction accorded by it to these building plans.

7. The door and window leaves shall be fixed in such a way that they shall not when open project on any street.

8. The party shall construct the premise only the purpose for which the sanction has been granted.

9. The building shall not be constructed within minimum mandatory distance as specified in Indian Electricity Rules and as per the requirement of power distributor/discom from the voltage lines running on any side of the site.

10. The land left open on consequences of their enforcement of the set back rule shall form part of the public street.

11. The thickness of outer walls will be maintained as per sanctioned plan.

12. The basic levels should be got ascertained from the concerned Official/Authority at the site of the construction.

13. The owner will display boards of minimum size of 3 ft. X 4ft. indicating the following

i. Plot No. and location …….....

ii. Name of lesse/owner …….....

iii. Use of the property as per lease deed …….....….....

iv. Date of sanction of Building Plan with No. ……....…….....…

v. Sanction valid up to …….....……....……

vi. Use of different floors and areas sanctioned …….....

vii. Name of the Architect & his address …….....

viii. Name of the contractor and his address ……...……

14. The provision of the display board on the construction site is a mandatory requirement and non-compliance of the same will invite a penalty of Rs. 5000/-.

15. It will be ensured that the construction / demolition work shall be carried out in such a manner that no disturbance/nuisance is caused to residents of the neighbourhood.

16. It will be ensured by the owner and the Architect that during the construction, the building plans sanctioned shall satisfy all the Environmental Conditions for Buildings and Constructions of Chapter 3, Annexure XIV of these Bye laws and as amended from time to time or any specific orders issued by the Govt. or Court/s.

17. Intimation of Completion of work up to Plinth Level, Plinth Level inspection and the issue of Plinth level Inspection shall be done as per procedures laid down in the Chapter 2 of these bye-laws.

18. The building shall be constructed strictly in accordance with the sanction plan as well as in accordance with the certificate submitted jointly by the owner/Architect/Structural Engineer for safety requirement as stipulated in Chapter 9 of these Building Bye-Laws, and the structural Design including safety from any natural hazards duly incorporated in the design of the building as per the Government Of India Notification issued time to time and Annexure VII of theses Bye Laws.

19. The mulba during the construction will be removed on weekly basis. If the same is not done, in that case the local body shall remove the mulba and the cost shall be borne by the owner of the plot.

20. During construction, it is mandatory on the part of the owner to properly screen the construction site of the main road by means of erecting a screen wall not less than 8 ft. in height from ground level which is to be painted to avoid unpleasant look from the road side. In addition to this a net or some other protective material shall be hoisted at the facades or the building to ensure that any falling material remains within the protected area.

21. Noise related activities will not be taken up for construction at night after 10.00 PM.

22. (i) Every builder or owner shall put tarpaulin on scaffolding around the area of construction and the building. No person including builder, owner can be permitted to store any construction material particularly sand on any part of the street, roads in any colony.

(ii) The construction material of any kind that is stored in the site will be fully covered in all respects so that it does not disperse in the air in any form.

(iii) The construction material and debris shall be carried in the trucks or other vehicles which are fully covered and protected so as to ensure that the construction debris or the construction material does not get dispersed into the air or atmosphere, in any form whatsoever.

(iv) The dust emissions from the construction site should be completely controlled and all precautions taken in that behalf.

(v) The vehicles carrying construction material and construction debris of any kind should be cleared before it is permitted to ply on the road after unloading of such material.

(vi) Every worker working on the construction site and involved in loading, unloading and carriage of construction material and construction debris shall be provided with mask to prevent inhalation of dust particles.

(vii) Every owner and or builder shall be under obligation to provide all medical help, investigation and treatment to the workers involved in the construction of building and carry of construction material and construction debris relatable to dust emission.

(viii) It shall be the responsibility of every builder to transport construction material and debris waste to construction site, dumping site or any other place in accordance with rules and in terms of this order.

(ix) All to take appropriate measures and to ensure that the terms and conditions of the earlier order and these orders should strictly comply with by fixing sprinklers, creations of green air barriers.

(x) Compulsory use of wet jet in grinding and stone cutting.

(xi) Wind breaking walls around construction site.

(xii) All efforts to be made to increase the 'tree cover' area by planting large number of trees of various species depending upon the quality content of soil and other natural attendant circumstances.

(xiii) All the builders who are building commercial, residential complexes which are covered under the EIA Notification of 2006 shall provide green belt around the building that they construct.

23. The sanctioning authority approves Architectural Drawings/Development Control norms with respect to the Building Bye Laws and Master Plan provisions only. The technical drawings/documents submitted by the owner/consultant/Architect/ Engineer/Structural Engineer/Landscape Architect /Urban Designer/Engineer for Utility Services are considered as part of the records/information supporting the building permit only. The responsibility of the correctness of information/application

of technical provisions fully vests with the owner/consultant/ Architect/Engineer/Structural Engineer/Landscape Architect /Urban Designer/Engineer for Utility Services and shall be liable as per laws.

24. No puncture, perforation, cutting, chiseling, trimming of any kind for any purpose are permitted in the structural members (beams / columns) submitted by the structural engineer as structural drawing for building permit in accordance with the relevant structural codes.

25. The sanction will be void ab initio if any material fact has been suppressed or mis-represented of if auxiliary conditions mentioned above are not complied.

Plot No……Pkt. No……..

Block No…….Sector No……

Delhi.

Encl: One set of sanctioned plan.

Note:

Copy for information and necessary action by:

i. Delhi Jal Board.

ii. Labour Department

iii. Power Discom/s

iv. Chief Inspector of Factories

v. Other external agencies ( if applicable) as per rules.

Yours Faithfully

For sanctioning authority _____

**REFUSAL OF SANCTION**

---

With reference to your application No _____ dated _____ for the grant of sanction for the erection of building/ execution of work in House

No._____ Plot No_____ Block No_____Scheme_____ Situated at _____ I am directed to inform you that the sanction has been refused on ---------- _____ (date) on the following grounds.

1

2

3

4

Yours Faithfully

For sanctioning authority _____

# FORM- B-2

**(Chapter 2, Para 2.4.4)**

**GRANT / REFUSAL OF REVALIDATION**

To,

_____

_____

_____

New Delhi.

File No_____ Dated: _____

Sir,

With reference to your application No _____ dated _____ for the grant of sanction for the erection of building/execution of work in House No._____ Plot No_____ Block No_____ Scheme_____ Situated at _____ I am directed to inform you that the sanction has been revalidated/ refused on _____(date) on the following grounds:

1

2

3

Yours Faithfully

For sanctioning authority _____

# FORM- C-1

**(Chapter 2, Para 2.5.4.a)**

**INTIMATION OF COMPLETION OF WORK UP TO**

**PLINTH LEVEL FOR MODERATE AND HIGH RISK BUILDINGS**

To,

_____

_____

_____

New Delhi.

This is to intimate that the Construction up to plinth/column up to plinth level has been completed in Building No. _____ _____on/in Plot No. _____SchemeNo._____Road/ Street_____Ward_____in accordance with permission/Letter No._____ dated_____ under my supervision and in accordance with the sanction.

Yours faithfully,

Digital Signature of Architect/Engineer/Supervisor_____

Dated _____

Digital Signature of Owner_____

Dated _____

## FORM- C-2

(Chapter 2, Para 2.5.3 & 2.5.4.b)

INSPECTION REPORT UPTO PLINTH LEVEL

BY THE OFFICE OF THE SANCTIONING AUTHORITY FOR MODERATE AND HIGH RISK BUILDINGS/ BY THE ARCHITECT/ENGINEER/SUPERVISOR FOR VERY LOW AND LOW RISK BUILDINGS

I ---------- working as a ---------- with ---------- have carried out the inspection of Building No. ---------- on/in Plot No. ---------- Scheme No ---------- Road/Street ----------Ward ----------in accordance with your permission no. ---------- dated ----------.

a. No deviation has been noticed. ☐

b. The following deviation from the sanctioned plans have been noticed which are against the provisions of Master Plan for Delhi/ Bye-Laws and are of non-compoundable nature.

Description of deviations noticed ----------

---

You are requested to stop further work till such time the above deviations are rectified and construction is brought in conformity to the Sanctioned Plans.

Yours faithfully,

For sanctioning authority _____ for Moderate and High Risk Building

Or

Digital Signature of Architect/Engineer/Supervisor_____for Very Low and Low Risk Building

Dated _____

## COMMON OCCUPANCY-CUM-COMPLETION REQUEST FORM

*(Chapter 2, Para 2.6 & 2.6.5)*

(INTIMATION OF BUILDING COMPLETION)

To,

_____

New Delhi.

Sir,

We hereby certify that the erection / re-erection or material alternation in / at building no. _____ on / in _____ Plot No. _____ Block No._____ situated at _____scheme has been supervised and has been completed on _____ according to the plans sanctioned, vided office communication no. _____ date _____. The work has been completed to our satisfaction, the workmanship and all the materials (type and grade) have been strictly in accordance with general and detailed specifications.

i. Certified that the building(s) has been constructed according to the sanctioned plan and structural design (one set of structural drawings as executed is enclosed) which incorporate the provisions of structural safety as specified in relevant prevailing IS Codes / Standards / Guidelines.

ii. Further certified that detailed drawings and specifications of all services prepared by engineer for utility services.

iii. It is also certified that construction has been done under supervision of Supervisor and adheres to the drawings submitted and the records of supervision have been maintained.

iv. a. For Existing Connection of DJB : Connection Number.

b. For Fresh Connection from DJB: Apply Online.

# DECLARATION PROFORMA
# CERTIFICATE OF STRUCTURAL SAFETY

*(Chapter 2, Para 2.6.5)*

(To be submitted by Structural Engineer)

The following certificate is submitted along with the building plans drawing while submitting the plans for obtaining sanction of building permit/occupancy-cum-completion for Building No. _____ on Plot no. _____ situated at _____ Scheme _____.

I. Certified that the building plans submitted to the sanctioning authority shall be/has been designed for safety requirements.

II. It is also certified that the structural design shall be/was based on National Building Code, including safety from natural hazards, based on soil conditions (as per Soil Testing Report no….. dated …. prepared by ……..) will be/has been taken into consideration and would be/has been duly incorporated in structural drawings of the building to be/so constructed.

Encl: Soil Testing Report in case of High Risk Building.

Encl:

1. Plans and Drawings (Chapter2, 2.6.1)
2. Ownership Documents (Chapter2, 2.6.2)
3. Lift Manufacture Certificate (Chapter2, 2.6.3)
4. Photographs of the building (Chapter2, 2.6.4)

Permission to occupy or use the building may be granted.

Any subsequent change from completion drawings will be the responsibility of the owners.

A) Digital Signature of the Owner

B) Digital Signature of Structural Engineer (Responsible for Structural Design)

C) Digital Signature of Architect/ Engineer/ Supervisor (Responsible for Architectural Design)

D) Digital Signature of the Supervisor (Responsible for supervision of the construction)

*Note: There is no requirement of submission of Affidavit(s)/ Notorised Affidavit(s)/ e-stamp paper(s)/ Bond(s) etc. along with this application form.*

# FORM- D-1

*(Chapter 2, Para 2.7.1/2.7.3)*

## OCCUPANCY-CUM-COMPLETION CERTIFICATE/
## PART OCCUPANCY-CUM-COMPLETION CERTIFICATE

Name of the sanctioning authority _____

File No._____ Dated: _____

Plan No._____

To,

Shri/ Miss/Smt._____ (OWNER[S])

_____

With reference to your notice of completion dated ___, it is certified that the building as per description below and certified plans of____ whose LOP & Bldg. plans were sanctioned vide letter No. ____dated____ and NOC for completion certificate as approved by DUAC/DFS and other statutory bodies, the OCC/Part OCC has been approved on____ as per the site inspection report with reference to Building Bye-Laws, MPD provisions, hygienic and sanitary conditions inside and in the surroundings and is declared fit for occupation.

The sanctioning authority approves Architectural Drawings/Development Control norms with respect to the Building Bye Laws and MPD provisions only. The technical drawings/documents submitted by the owner/consultant/Architect/Engineer/Structural Engineer/Landscape Architect /Urban Designer/Engineer for Utility Services are considered as part of the records/information supporting the building permit only. The responsibility of the correctness of information/application of technical provisions fully vests with the owner/consultant/ Architect/Engineer/Structural Engineer/Landscape Architect /Urban Designer/Engineer for Utility Services and shall be liable as per laws.

The structural stability of the building is based on the certificate given jointly by the Owner/Architect/Structural Engineer along with one set of Structural Drawings, incorporating therein the provisions of Structural Safety as specified in the relevant prevailing IS Codes/Standards/Guidelines stated in the Government of India Notification bearing No.SO-248(E) dated 21.3.2001 and clause 9.1, 9.2.1, 9.2.2 and Annexure VII of this Bye Laws. For the fire-safety the same has been based on the Fire Safety Certificate given by the Delhi Fire Services, Government of NCT of Delhi. The sanctioning authority shall not have any responsibility for any loss caused to the building from any natural hazard / calamity.

Completion Certificate is issued for Plot No._____as per enclosed drawings.

Yours Faithfully

Name of the sanctioning authority _____

# FORM- D-2

*(Chapter 2, Para 2.7.9)*

REJECTION OR COMPLIANCE IN RESPECT OF

OCCUPANCY CERTIFICATE

File No._____ Dated: _____

Sh./Smt._____

_____

Subject: Occupancy Certificate in respect of Plot No_____Block No._____Scheme_____.

Dear Sir / Madam,

1) With reference to your letter dated _____

2) With reference to your notice of completion dated _____

3) In continuation of this office letter of even no. _____ dated on the subject noted above, I am directed to inform you that your case has been examined and occupancy certificate is rejected for the reasons as given below:-

I am directed to request you to comply with the following: -

(a) SUBMISSION OF THE FOLLOWING DOCUMENTS

(1)

(2)

(b) RECTIFICATION OF THE FOLLOWING DEVIATIONS

(1)

(2)

(c) The following item can be regularized on payment of compounding fee noted against each

| Sl. No | Item | Rate of compounding Fee (in Rs.) | Amount of Compounding Fee (in Rs.) |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |

Total Compounding Fee Rs. ----------

a. Cheque/ Demand Draft/ Online Payment/ Cash payment will be accepted on all working days.

b. You are, therefore requested to do the needful by ---------- failing which your request for the issue of Occupancy Certificate will be rejected without any further reference to you and necessary action under the law will be initiated.

c. Please quote your file number while sending the reply of the letters

Yours Faithfully

Name of the sanctioning authority _____

# FORM- D-3

*(Chapter 2, Para 2.8)*

REGULARISATION CERTIFICATE

Name of the sanctioning authority _____

File No._____ Dated: _____

Plan No._____

To,

**Shri/ Miss/Smt._____ (OWNER[S])**

_____

With reference to your notice of regularization dated----------I hereby certify that building, as per description below and enclosed certified plan/s at Plot No----------Block No ---------- Scheme ---------- has been inspected with reference to Building Bye-law and MPD provisions is declared regularized (building/ or part thereof).

The sanctioning authority approves Regularization Plan/s with respect to the Building Bye Laws and MPD provisions only. The technical drawings/documents submitted by the owner/consultant/Architect/Engineer/Structural Engineer/Landscape Architect / Urban Designer/Engineer for Utility Services for regularization are considered as part of the records/information supporting the building permit only. The responsibility of the correctness of information/application of technical provisions fully vests with the owner/consultant/ Architect/Engineer/Structural Engineer/Landscape Architect /Urban Designer/Engineer for Utility Services and shall be liable as per laws.

The structural stability of the building is based on the certificate given jointly by the Owner/Architect/Structural Engineer along with one set of Structural Drawings, incorporating therein the provisions of Structural Safety as specified in the relevant prevailing IS Codes/Standards/Guidelines stated in the Government of India Notification bearing No.SO-248(E) dated 21.3.2001 and clause 9.1, 9.2.1, 9.2.2 and Annexure VII of this Bye Laws.. For the fire-safety the same has been based on the Fire Safety Certificate given by the Delhi Fire Services, Government of NCT of Delhi. The sanctioning authority shall not have any responsibility for any loss caused to the building from any natural hazard / calamity. The description of the construction work regulerised is given as under:

**DESCRIPTION OF CONSTRUCTION WORK BLOCK WISE/BUILDING WISE**

1. Block/Building No.

2. Details of regularised work floor wise.

Yours Faithfully

Name of the sanctioning authority_____

# ANNEXURE - I

**1.0 QUALIFICATION AND COMPETENCE OF PROFESSIONALS** (Please refer clause 2.0.4(i) of this document)

**1.1 Essential requirements:-** Every building/development work for which permission is sought shall be planned, designed and supervised by registered professionals. The registered professionals for carrying out the various activities shall be (a) Architect,

(b) Engineer, (C) Structural engineer, (d) Supervisor, (e) Town Planner, (f) Landscape Architect, (g) Urban Designer, and Utility Service Engineer. Requirements of registration for various professionals by the authority / concerned local body / the Body governing such profession constituted under a statute, if any, applicable to practice within the Sanctioning Authority jurisdiction, to carry out various activities, is given below:-

**1.2 Requirements for Registration and Competence of Professionals:**

a. **Architect:** The minimum qualification for an architect shall be the qualifications as provided in the Architects Act, 1972, for registration with Council of Architecture

❖ *Competence:-* The registered architect shall be competent to carry out the work related to the building/development permit as given below:

1. All plans and information connected with building permit
2. Issuing certificate of supervision and completion pertaining to architectural aspects.
3. Preparation of sub- division plans and related information connected with development permit of area up to 1 hectare.
4. Issuing certificate of supervision for development of land of area up to 1 hectare.

b. Engineer: The minimum qualifications for an engineer shall be graduate in civil engineering/ architectural engineering of recognized Indian or foreign university, which qualifies him/her for the corporate membership of Institution of Engineers(India); and the membership of Institution of Engineers(India) or any other statutory body governing such profession, if any with minimum 2 years of experience.

❖ *Competence:* The engineer shall be competent to carry out the work related to the building/development permit as given below:

1. All plans and information connected with building permit on plots upto 500 sq.m.
2. Structural details and calculations of buildings on plot up to 500sq.m and 15 m in height.
3. Issuing certificate of supervision and completion of all buildings.
4. Preparation of all service plans and related information connected with development permit; and
5. Issuing certificate of supervision for development of land of all areas

c. **Structural Engineer:** The minimum qualifications for an engineer shall be graduate in civil engineering/ architectural engineering of recognized Indian or foreign university, which qualifies him/her for the corporate membership of Institution of Engineers(India); and the membership of Institution of Engineers(India) or any other statutory body governing such profession, and with minimum 3 years' experience in structural engineering practice with designing and field work.

*Note:* The 3 years experience shall be relaxed to 2 years in the case of post-graduate degree of recognized Indian or foreign university in the branch of structural engineering. In case of doctorate in structural engineering, the experience required would be one year.

❖ *Competence:* The structural engineer shall be competent to prepare the structural design, calculations and details for all buildings and its supervision. In case of buildings having special structural features, as decided by the Sanctioning Authority, which are within the horizontal areas and vertical limits specified in competence of Engineer (2) and competence of Supervisor (1) shall be designed only by Structural Engineers.

d. **Supervisor:** The minimum qualifications for a supervisor shall be diploma in civil engineering or architectural assistantship with minimum 5 years of experience, in building design/construction, construction management and supervision.

❖ *Competence:* The supervisor shall be competent to carry out the work related to the building permit as given below:

1. All plans and related information connected with building permit for residential buildings on plot up to 200 sq.m ; and
2. Issuing certificate of supervision for buildings per (1) above.

e. **Town Planner:** The minimum qualification for a town planner shall be the Associate Membership of the Institute of Town Planners, India or graduate or post-graduate degree in Town and Country Planning or equivalent.

❖ *Competence:* The town planner shall be competent to carry out the work related to the development permit as given below:

1. Preparation of plans for land sub-division/layout land related information connected with development permit for all areas: and
2. Issuing of certificate of supervision for development of land of all areas.

*Note:* However, for land layouts for development permit above 5 hectare in area, landscape architect shall also be associated, and for land development infrastructural services for roads, water supplies, sewerage/drainage, electrification, etc. the registered engineers for utility services shall be associated.

f. **Landscape Architect:** The minimum qualification for a landscape architect shall be the bachelor or Master's degree in landscape architecture or equivalent from recognized Indian or foreign university.

❖ *Competence:* The landscape architect shall be competent to carry out the work related to landscape design for building / development permit for land area 5 hectares and above . In case of metro-cities, this limit of land area shall be 2 hectares and above.

*Note:* For smaller areas below the limits indicated above, association of landscape architect may also be considered from the point of view of desired landscape development.

g. **Urban Designer:** The minimum qualification for an urban designer shall be the master's degree in urban design or equivalent from recognized Indian or foreign university.

❖ *Competence:* The urban designer shall be competent to carry out the work related to the building permit for urban design for land areas more than 5 hectares. She/he shall also be competent to carry out the work of urban renewal for all areas.

*Note:* For smaller areas below the limits indicated above, association of urban designer may be considered from the point of view of desired urban design.

h. **Engineers for Utility Services:**

1. **Plumbing Engineer:** The minimum qualification for Plumbing Engineer shall be graduate in Civil Engineering from recognized Indian or foreign university, or the Member of Civil Engineering Division of recognized Indian or foreign university, of the Institution of Engineers (India) or the statutory body governing such profession, if any with three years experience in Plumbing Engineering practices with designing and field work.

   ❖ *Competence:* The Plumbing Engineer shall be competent to plan and design the scheme, prepare estimate, execute and supervise the various Water Supply, Drainage and Sanitation (including Solid Waste Management), Gas Supply schemes for buildings.

2. **HVAC (Heating, Ventilation and Air Conditioning) Engineer:** The minimum qualification for a HVAC (Heating,

Ventilation and Air Conditioning) Engineer shall be graduate in Mechanical Engineering of recognized Indian or foreign university, or the Member of Mechanical Engineering Division of recognized Indian or foreign university, of the Institution of Engineers (India) or the statutory body governing such profession, if any with three years' experience in Mechanical Engineering practices with designing (HVAC) and field work.

❖ *Competence:* The HVAC Engineer shall be competent to plan and design the scheme, prepare estimate, install and monitor the various Heating, Ventilation and Air Conditioning Services for buildings.

3. **Electrical Engineer:** The minimum qualification for an Electrical Engineer shall be graduate in Electrical Engineering of recognized Indian or foreign university, or the Member of Electrical Engineering Division of recognized Indian or foreign university, of the Institution of Engineers (India) or the statutory body governing such profession, if any with three years experience in Electrical Engineering practices with designing and field work.

❖ *Competence:* The Electrical services engineer shall be competent to plan and design the scheme, install and monitor the various Electrical and allied installations, installation of lifts, escalators etc. for buildings.

i. **Quality Auditor:** The minimum qualification for quality auditor shall be a bachelor degree in Civil Engineering or equivalent with five years' experience in testing of building materials including concrete and/or experience in quality control work with a reputed construction agency or Master degree in Civil Engineering or equivalent with two years' experience as above or Architect or equivalent with a degree or diploma in Construction Management and five years of experience in quality control aspects of construction.

The experience as stated above shall be under one or more registered quality inspector/s of in quality work under one or more reputed construction agencies of minimum ten years of standing from within or outside the area of jurisdiction of the Sanctioning Authority.

Competence:The empanelled quality auditor shall be competent to carry out the construction work of a high-rise building, under an independent quality inspection programme and prepare all reports and other submissions only be signed by Quality Auditor.

j. **Geo- Technical Engineer:** The minimum qualification for Geo- Technical Engineer shall be M.E. (or equivalent) in Geo-technical engineering from recognized Indian or foreign university with minimum 10 years of experience. The experience as stated shall be under one or more Geo-technical Agency. Such agencies shall be of minimum ten years of standing.

❖ *Competence:* The Geo- Technical engineer shall be competent to carry out the work related to the building permit as given below:

1. To carry out soil investigation at proposed locations as per specifications of Structural Engineer.
2. To recommend various types of foundation for proposed structure and loading with supporting calculations.
3. To enable Structural Engineer to take site decision in case soil strata is different than soil investigation report.
4. To list out precautionary measures so that there is no damage to adjacent property.

k. **Group or Agency:** When an agency or group comprising of qualified architect/engineer is practicing, then the qualifications and competence of work will be combination of the individual qualification and competence, given under 1.2 (a) of this annexure – for Architects and 1.2 (b) – for Engineers respectively and the agency shall be duly empaneled by the Authority/ concerned local body.

*Note:* All the above professionals (except Architects) need to empanel themselves with Authority/ concerned local body as the case may be.

# ANNEXURE -II

**1. Conservation of Heritage Sites including Heritage Building, Heritage/ Precincts and Natural Feature Areas** (Please refer clause 2.3.3 and 7.26 of this document).

Conservation of Heritage sites shall include buildings, artifacts, structures, areas and precincts of historic, aesthetic, architectural, cultural or environmentally significant (heritage buildings and heritage precincts), natural feature areas of environmental significance or sites of scenic beauty.

1.1. ***Applicability:*** This regulation shall apply to heritage sites which shall include those buildings, artifacts, structures, streets, areas and precincts of historic, architectural, aesthetic, cultural or environmental value ( hereinafter referred to as Listed Heritage Buildings/Listed Heritage Precincts) and those natural feature areas of environmental significance or of scenic beauty including but not restricted to, sacred groves, hills, hillocks, water bodies ( and the areas adjoining the same), open areas, wooded areas, points, walks, rides, bridle paths (hereinafter referred to as 'listed natural feature areas') which shall be listed in notification(s) to be issued by Government/identified in MPD.

1.1.1 *Definitions:*

(a) "Heritage building" means and includes any building of one or more premises or any part thereof and/or structure and/or artifact which requires conservation and/or preservation for historical and/or environmental and/or architectural and/or artisanary and/or aesthetic and/or cultural and /or environmental and /or ecological purpose and includes such portion of land adjoining such building or part thereof as may be required for fencing or covering or in any manner preserving the historical and/or architectural and/or aesthetic and/or cultural value of such building.

(b) "Heritage precincts" means and includes any space that requires conservation and/or preservation for historical and/or architectural and/or aesthetic and/or cultural and/or environmental and/or ecological purpose. Such space may be enclosed by walls or other boundaries of a particular area or place or building or by an imaginary line drawn around it.

(c) "Conservation" means all the processes of looking after a place so as to retain its historical and/or architectural and/or aesthetic and/or cultural significance and includes maintenance, preservation, restoration, reconstruction and adoption or a combination of more than one of these.

(d) "Preservation" means and includes maintaining the fabric of a place in its existing state and retarding deterioration.

(e) "Restoration" means and includes returning the existing fabric of a place to a known earlier state by removing accretions or by reassembling existing components without introducing new materials.

(f) "Reconstruction" means and includes returning a place as nearly as possible to a known earlier state and distinguished by the introduction of materials (new or old) into the fabric. This shall not include either recreation or conjectural reconstruction.

1.2 **Responsibility of the Owners of Heritage Buildings:** It shall be the duty of the owners of heritage buildings and buildings in heritage precincts or in heritage streets to carry out regular repairs and maintenance of the buildings. The Government, the Municipal Corporation of Delhi or the Local Bodies and Authorities concerned shall not be responsible for such repair and maintenance except for the buildings owned by the Government, the Municipal Corporation of Delhi or the other local bodies.

1.3 **Restrictions on Development /Re-development / Repairs etc.**

(i) No development or redevelopment or engineering operation or additions/ alterations, repairs, renovations including painting of the building, replacement of special features or plastering or demolition of any part thereof of the said listed buildings or listed precincts or listed natural feature areas shall be allowed except with the prior permission of Commissioner, MCD, Vice Chairman DDA/Chairman NDMC. Before granting such permission, the agency concerned shall consult the Heritage Conservation Committee to be appointed by the Government and shall act in accordance with the advice of the Heritage Conservation Committee.

(ii) Provided that, before granting any permission for demolition or major alterations / additions to listed buildings (or buildings within listed streets or precincts, or construction at any listed natural features, or alternation of boundaries of any listed natural feature areas, objections and suggestions from the public shall be invited and shall be considered by the Heritage Conservation Committee.

(iii) Provided that, only in exceptional cases, for reasons to be recorded in writing, the Commissioner, MCD/Vice Chairman DDA /Chairman NDMC may refer the matter back to the Heritage Conservation Committee for reconsideration.

However, the decision of the Heritage Conservation Committee after such reconsideration shall be final and binding.

1.4 **Penalties:** Violation of the regulations shall be punishable under the provisions regarding unauthorized development. In case of proved deliberate neglect of and/ or damage to Heritage Buildings and Heritage precincts, or if the building is allowed to be damaged or destroyed due to neglect or any other reason, in addition to penal action provided under the concerned Act, no permission to construct any new building shall be granted on the site if a Heritage Building or Building in a Heritage Precinct is damaged or pulled down without appropriate permission from Commissioner, MCD/Vice Chairman DDA/ Chairman NDMC.

It shall be open to the Heritage Conservation Committee to consider a request for re-building/reconstruction of a Heritage Building that was unauthorized demolished or damaged, provided that the total built-up area in all floors put together in such new construction is not in excess of the total built up area in all floors put together in the original Heritage Building in the same form and style in addition to other controls that may be specified.

1.5 **Preparation of List of Heritage Sites including Heritage Buildings, Heritage Precincts and Listed Natural Features Areas:** Preparation of List of Heritage Sites including Heritage Buildings, Heritage Precincts and Listed Natural Features Areas is to be prepared and supplemented by the Commissioner MCD/ Vice-Chairman DDA/Chairman NDMC on the advice of the Heritage Conservation Committee. Before being finalized, objections and suggestions of the public are to be invited and considered. The said list to which the regulation applies shall not form part of this regulation for the purpose of Building Bye-laws. The list may be supplemented from time to time by Government on receipt of proposal from the agency concerned or by Government suo moto provided that before the list is supplemented, objections and suggestions from the public be invited and duly considered by the Commissioner, MCD/ Vice-Chairman DDA/Chairman NDMC and/or Government and/ or Heritage Conservation Committee.

When a building or group of building or natural feature areas are listed it would automatically mean (unless otherwise indicated) that the entire property including its entire compound/plot boundary along with all the subsidiary structures and artifacts, etc. within the compound/plot boundary, etc. shall form part of list.

1.6 **Alteration/Modification/Relaxation in Development Norms:** On the advice of the said Heritage Conservation Committee to be appointed by the Government and for reasons to be recorded in writing, the Commissioner, MCD/ Vice-Chairman DDA/Chairman NDMC shall follow the procedure as per DDA Act, 1957 to alter, modify or relax the Development Control Norms prescribed in the MPD, or Building Bye-laws of Delhi if required, for the conservation or preservation or retention of historic or aesthetic or cultural or architectural or environmental quality of any heritage site.

1.7 **Heritage Precincts/ Natural Feature Areas:** In case of streets, precincts, areas and, (where deemed necessary by the Heritage Conservation Committee) natural feature areas notified as per the provisions of this Building Bye-Laws No. 1.5 above, development permissions shall be granted in accordance with the special separate regulation prescribed for respective streets, precincts/natural feature areas which shall be framed by the Commissioner, MCD/ Vice-Chairman DDA/Chairman NDMC on the advice of the Heritage Conservation Committee.

Before finalizing the special separate regulations for precincts, streets, natural features, areas, the draft of the same shall be published in the official gazette and in leading l newspapers for the purpose of inviting objections and suggestions from the public. All objection and suggestions received within a period of 30 days from the date of publication in the official gazette shall be considered by the Commissioner, MCD/ Vice-Chairman DDA/Chairman NDMC/Heritage Conservation Committee.

After consideration of the above suggestions and objections, the agency concerned acting on the advice of the Heritage Conservation Committee shall modify ( if necessary) the aforesaid draft separate regulations for streets, precincts, areas and natural features and forward the same to Government for notification.

1.8 **Road Widening:** Widening of the existing roads under the Master Plan for Delhi/ Zonal Development Plan or in the Layout Plan shall be carried out considering the existing heritage buildings (even if they are not included in a Heritage Precinct) or which may affect listed natural features areas.

1.9 **Incentive Uses for Heritage Buildings:** In cases of buildings located in non-commercial use Zones included in the Heritage Conservation List, if the owner /owners agree to maintain the listed heritage building as it is in the existing state and to preserve its heritage state with due repairs and the owner /owners/ lessees give a written undertaking to the effect, the owner/ owners/lessees may be allowed with the approval of the Heritage Conservation Committee within permissible use zone to convert part or whole thereof of the non-commercial area within such a heritage building to commercial /office use/hotel. Provided that if the heritage building is not maintained suitably or if the heritage value of the building is spoiled in any manner, the commercial /office /hotel use shall be disallowed.

1.10 **Maintaining Skyline and Architectural Harmony:** After guidelines are framed, building within heritage precincts or in the vicinity of heritage sites shall maintain the skyline in the precinct and follow the architectural style (without any high-rise or multistoried development) as may be existing in the surrounding area, so as not to diminish or destroy the value and beauty of or the view from the said heritage sites. The development within the precinct or in the vicinity of heritage sites shall be in accordance with the guidelines framed by the Commissioner, MCD/ Vice-Chairman DDA/Chairman NDMC on the advice of the Heritage Conservation Committee or separate regulations/ guidelines: if any, prescribed for respective zones by DDA/ NDMC/MCD.

1.11 **Restrictive Covenants:** Restrictions existing as on date of this Notification imposed under covenants, terms and conditions on the leasehold plots either by Government or by Municipal Corporation of Delhi or by Delhi Development Authority or

by New Delhi Municipal Council shall continue to be imposed in addition to Development Control Regulations. However, in case of any conflict with the heritage preservation interest/environmental conservation, this Heritage Regulation shall prevail.

1.12: **Grading of the Listed Buildings/Listed Precincts:** Listed Heritage Buildings/ Listed Heritage Precincts may be graded into three categories. The definition of these and basic guidelines for development, permissions are as follows:-

Listing does not prevent change of ownership or usage. However, change of use of such Listed Heritage Building/Listed Precincts is not permitted without the prior approval of the Heritage Conservation Committee. Use should be in harmony with the said listed heritage site.

| Grade I | Grade-II | Grade-III |
|---|---|---|
| (A) **Definition**<br>Heritage Grade-I comprises buildings and precincts of national or historic importance, embodying excellence in architectural style, design, technology and material usage and/ or aesthetics; they may be associated with a great historic event, personality, movement or institution. They have been and are the prime landmarks of the region. All natural sites shall fall within Grade-I.<br>(B) Objective: Heritage Grade-I richly deserves careful preservation.<br>(C) **Scope for Changes:**<br>No interventions be permitted either on exterior or interior of the heritage building or natural features unless it is necessary in the interest of strengthening and prolonging, the life of the buildings/ or precincts or any part or features thereof. For this purpose, absolutely essential and minimum changes would be allowed and they must be in conformity with the original.<br>(D) **Procedure:** Development permission for the changes would be given on the advice of the Heritage Conservation Committee.<br>(E) **Vistas/ Surrounding Development:**<br>All development in areas surrounding Heritage Grade-I shall be regulated and controlled, ensuring l that it does not mar the grandeur of, or view from Heritage | Heritage Grade-II (A&B) comprises of buildings and precincts of regional or local importance possessing special architectural or aesthetic merit, or cultural or historical significance though of a lower scale in Heritage Grade-I. They are local landmarks, which contribute to the image and identify of the region. They may be the work of master craftsmen or may be models of proportion and ornamentation or designed to suit a particular climate.<br>Heritage Grade-II deserves intelligent conservation.<br>(Grade-II (A) Internal changes and adaptive re-use may by and large be allowed but subject to strict scrutiny. Care would be taken to ensure the conservation of all special aspects for which it is included in Heritage Grade-II<br>Grade-II (B) In addition to the above, extension or additional building in the same plot or compound could in certain circumstances, be allowed provided that the extension/ additional building is in harmony with ( and does not detract from) the existing heritage building(s) or precincts especially in terms of height and façade.<br>Development permission for the changes would be given on the advice of the Heritage Conservation Committee.<br>All development in areas surrounding Heritage Grade-II shall be regulated and controlled, ensuring l that it does not mar the grandeur of, or view from Heritage Grade-II | Heritage Grade-III comprises building and precincts of importance for townscape; that evoke architectural, aesthetic or sociological interest though not as much as in Heritage Grade-II. These contribute to determine the character of the locality and can be representative of lifestyle of la particular community or region and may also be distinguished by setting, or special character of the façade and uniformity of height, width and scale.<br>Heritage Grade-III deserves intelligent conservation (though on a lesser scale than Grade-II and special protection to unique features and attributes)<br>Heritage Grade-III deserves intelligent conservation (though on a lesser scale than Grade-II and special protection to unique features and attributes).<br>Internal changes and adaptive re-use may by and large be allowed. Changes an include extensions and additional buildings in the same plot or compound. However, any changes should be such that they are in harmony with and should be such that they do not detract from the existing heritage building/precinct.<br>Development permission for the changes would be given on the advice of the Heritage Conservation Committee.<br>All development in areas surrounding Heritage Grade-III shall be regulated and controlled, ensuring l that it does not mar the grandeur of, or view from Heritage Grade-III |
| Grade-I | | |

Nothing mentioned above should be deemed to confer a right on the owner /occupier of the plot to demolish or reconstruct or make alterations top his heritage building/buildings in a heritage precinct or on a natural heritage site if in the opinion of the Heritage Conservation Committee, such demolition/reconstruction/alteration is undesirable.

The Heritage Conservation Committee shall have the power to direct, especially in areas designated by them, that the exterior design and height of buildings should have their approval to preserve the beauty of the area.

1.13 **Signs and Outdoor Display Structures Including Street Furniture on Heritage Sites:** Commissioner, MCD/Vice-Chairman DDA/Chairman NDMC on the advice of the Heritage Conservation Committee shall frame regulations or guidelines to regulate signs, outdoor display structures and street furniture on heritage sites.

1.14 **Composition of Heritage Conservation Committee:-** The Heritage Conservation Committee shall be appointed by the Government comprising of:

| | | |
|---|---|---|
| i. | Special Secretary/Additional Secretary, (Ministry of Urban Development) | Chairman |
| ii. | Additional Director General (Architecture), CPWD | Member |
| iii. | Structural Engineer having experience of ten years In the field and membership of the Institution of Engineers, India Architect having 10 years experience<br>a. Urban Designer<br>b. Conservation Architect | Member |
| iv. | Environmentalist having in-depth knowledge and Experience of 10 years of the subject. | Member |
| v. | Historian having knowledge of the region & having 10 years experience in the field. | Member |
| vi. | Natural historian having 10 years experience in the field. | Member |
| vii. | Chief Planner, Town & Country Planning Organization | Member |
| viii. | Chief Town Planner, MCD | Member |
| ix. | Commissioner (Plg.), DDA | Member |
| x. | Chief Architect, NDMC | Member |
| xi. | Representative of DG, Archeological Survey of India | Member |
| xii. | Secretary, Delhi Urban Art Commission | Member Secretary |

xiii. The Committee shall have the power to co-opt up to three additional members who may have related experience.

xiv. The tenure of the Chairman and Members of other than Government Department/Local Bodies shall be three years.

1.15 **The terms of reference of the Committee shall inter alia be:**

(i) To advice the Commissioner, MCD/Vice Chairman DDA/Chairman NDMC whether development permission to be granted under the bye-law 7.26 and the conditions of permission.

(i) to prepare a supplementary list of heritage sites, which include buildings artifacts, structures, streets, areas, precincts of historic aesthetic, architectural, cultural, or environmental significance and a supplementary list of natural feature areas of environmental significance, scenic beauty including but not restricted to sacred groves, hills, hillocks, water bodies (and the areas adjoining the same), open areas, wooded areas, points, walks, rides, bridle paths etc. to which this Building Bye-law would apply.

(ii) To advise whether any relaxation, modification, alteration, or variance of any of the Building Bye-laws is called for;

(iii) To frame special regulations/ guidelines for precincts and if necessary for natural feature areas to advise the Commissioner, MCD/ Vice-Chairman DDA/Chairman, NDMC regarding the same;

(iv) To advise whether to allow commercial / office/hotel use in the (name the areas) and when to terminate the same;

(v) To advise the Commissioner, MCD/ Vice-Chairman DDA/Chairman, NDMC in the operation of this Building Bye-law to regulate or eliminate/erection of outside advertisements/ bill boards/street furniture;

(vi) To recommend to the Commissioner, MCD/ Vice-Chairman DDA/Chairman, NDMC guidelines to be adopted by those private parties or public/ government agencies who sponsor beautification schemes at heritage sites;

(vii) To prepare special designs and guidelines/ publications for listed buildings, control of height and essential façade characteristics such as maintenance of special types of balconies and other heritage items of the buildings and to suggest suitable designs adopting appropriate materials for replacement keeping the old form intact to the extent possible;

(viii) To appear guidelines relating to design elements and conservation principles to be adhered to and to prepare other guidelines for the purposes of this Regulation;

(ix) To advise the Commissioner, MCD/ Vice-Chairman DDA/Chairman, NDMC on any other issues as may be required from time to time during the course of scrutiny of development permissions and in overall interest of heritage/ conservation;

(x) To appear before the Government either independently or through or on behalf of the Commissioner, MCD/ Vice-Chairman DDA/Chairman, NDMC in cases of Appeals under DDA/MCD/NDMC Act in cases of listed buildings / heritage buildings and listed precincts/ heritage precincts and listed natural feature areas.

1.16 **Implications of Listing as Heritage Buildings:** The Regulations do not amount to any blanket prevention of demolition or of changes to Heritage Buildings. The only requirement is to obtain clearance from Commissioner, MCD/ Vice-Chairman DDA/Chairman, NDMC and Heritage Conservation Committee from heritage point of view.

1.17 **Ownership not affected:** Sale and purchase of Heritage Buildings does not require any permission from Municipal Corporation of Delhi / Delhi Development Authority/ New Delhi Municipal Council or Heritage Conservation Committee. The Regulations do not affect the ownership or usage. However, such usage should be in harmony with the said listed precincts/ buildings.

# ANNEXURE –III

All fees and charges to be decided by Sanctioning Authority as notified from time to time

**1. Fees and Charges** (Please refer clause 2.2 of this document).

a. **Building Permit Fee:** No building application shall be deemed valid unless and until the owner giving notice has paid the building plan fees on building application as per schedule given below:

i. Building Permit fee for Sanction/Revised Sanction/Completion/ Regulerisation all buildings shall be calculated at the rate of Rs.10/- per sq.m of Built Up Area (including basement floor, stilt floor). In case of Storage building/ Warehouses/ Godowns the fee shall be calculated at the rate of Rs.2/- per sq.m of Built Up Area (including basement floor, stilt floor).

ii. Fee for additional/alteration/ revalidation shall be same as (i) above.

iii. Revalidation of plans: - Fee shall be same as (i) above.

iv. Fee for layout/land sub-division/approval shall be calculated

@ Rs.10, 000/- per acre and same for the part thereof.

(@ Rs. 1,000/-In case of Storage building/Warehouses/ Godowns)

v. The fee for resubmission of rejected Building Plan application/permit shall be charged at the rate of Rs. 1/- per sqm of built up area for upto three subsequent rejections. In case the Building Plan application/permit is rejected for the fourth and fifth time, the Building Permit fee shall be charged at the rate of 25% and 50% respectively of the original Building Permit fee (i. above) - calculated for the first time, on the same Online ID. In case, the Building Plan application/permit is rejected for the sixth time, the applicant/ architect shall have to pay 100% processing/ permit fee and will have to apply with new online ID afresh.

b. **Stacking Charges**

i) Rs. 20/- per sq.m of proposed Built Up Area including basement and stilts. plots size up to 100 sq.m

ii) Rs. 50/- per sq.m of proposed Built Up area including basement and stilts. Plots size above 100-2000 sq.m

iii) Rs.5/per sqm of proposed Built Up Area including basement and stilts. Storage Building/Warehouses/ Godowns

iv) For plots above 2000 sq.m, the material will be stacked inside the plot area.

2 **Fees and charges for Group Housing schemes**

a. Fee for approval: Fee for approval of Layout Plan/ Site Plan or Sub-division Plan@ Rs. 10,000/- per acre

b. Betterment levy/additional FAR charges and penalty/compounding charges/special compounding charges:

The gazette notification of 23.07.98 regarding enhanced FAR, number of Dwelling Units shall be charged @ Rs. 450/- sq.m over and above the FAR of group housing given in Master Plan for Delhi- 2001 -

| Notification | Max. FAR | Net Housing Density | Max. height |
|---|---|---|---|
| Dated 1.8.90 | 133 | 140 | 26m |
| Dated 23.7.98 | 167 | 175 | 33m |
| Difference | | 35 | |

c. **Surcharge:** In cases where the additional construction has already been carried out without getting sanction as per notification 23.07.1998 norms but which are within the norms as revised vide notification dated 23.7.1998, the construction will be regularized on payment of the levy plus a surcharge of 10%. This will be addition to the existing compounding fee, etc.

**2.1.1 Fees for Inspection and completion**

a. Notice for inspection of completion work up to plinth level shall be accompanied with fee of Rs.500/-Please refer Form C-1

b. Application for completion certificate shall be accompanied with fee of Rs. 10/- per sq.m of covered area.

c. Pre-occupancy charges: - Pre-occupancy charge @ Rs. 25,000/- per dwelling unit in case of group housing.

For Commercial building @ Rs. 2000/- per sq.m

For Institutional/Govt./Others@ Rs. 500/- per sq.m

**Note:**

a. Fees & Charges are to be determined by the Authority/ concerned local body from time to time and shall be payable by applicant/Owner.

b. Charges for compoundable deviations shall be as per Annexure IV.

c. Charges applicable for compoundable construction shall be as per Development Code clause 3(12) of MASTER PLAN for DELHI 2021 (Chapter-17) [Building Bye laws- Annexure IV, Clause 3(12)].

**2.1.1 Peripheral charges:-** Peripheral charges are to be paid by plot owner of Co-operative House Building Society Group IV for laying of such services by the DDA @ Rs. 70/-(in view of Hon'ble Court orders and consequent office order No. 80 dated. 12.06.03) per sq.m of net plot area at the time of sanction of building plans. Also, individual plot owner will submit an undertaking in the prescribed format for deposition of peripheral charges, at the time of submission of Building Plans.

3 **Betterment charges for additional construction at Terrace:-** As per Notification No.K-12016/10/82-DD IIA dt.10.08.83, the permission of construction at terrace as a dwelling unit was permitted, provided the intending builders deposit betterment charges@150/-per sq.m of built up area either at the time of sanction of building plans or regularization of structure at the time of issue of completion/occupancy certificate. The betterment charges are levied for coverage beyond 25% and in case of provision of regular dwelling unit proposed even with 25% and in case of provision of regular dwelling unit proposed even with 25% coverage, full betterment charges are levied.

4 **Additional FAR charges:-** Means levy payable on the additional FAR allowed @ Rs. 450/- per sq.m to be calculated for additional FAR, applicable on individual residential plot vide Notification No. K-12016/5/79-DD IIA/VA/IB dated. 23.07.98 over and above the FAR applicable vide Notification No. K-12016/5/79-DD IIA/IB dated. 15.05.95 which is shown in Table 1 below:

Table 1: The details of additional FAR applicable on individual residential plots are given in the following table

| S. No. | Area of the Plot (Sq. m) | FAR as per Notification dated 23.07.98 | FAR as per Notification dated 15.05.95 | Difference (FAR to be charged) |
|---|---|---|---|---|
| 1 | Below 32 | 225 | 150 | 75 |

| | | | | |
|---|---|---|---|---|
| 2. | Above 32 to 50 | 225 | 150 | 75 |
| 3. | Above 50 to 100 | 225 | 180 | 45 |
| 4. | Above 100 to 250 | 200 | 160 | 40 |
| 5.(a) | Above 250 to 500 | 150 | 140 | 10 |
| (b) | Above 500 to 750 | 120 | 100 | 20 |
| 6. | Above 750 to 1000 | 100 | 83 | 17 |
| 7. | Above 1000 to 1500 | 100 | 83 | 17 |
| 8. | Above 1500 to 2250 | 100 | 83 | 17 |
| 9. | Above 2250 to 3000 | 100 | 83 | 17 |
| 10. | Above 3000 to 3750 | 100 | 83 | 17 |
| 11. | Above 3750 | 100 | 83 | 17 |

5 **Surcharge:** In cases where the additional construction has already been carried out without getting sanction as per notification 23.07.1998 norms but which are within the norms as revised vide notification dated 23.7.1998, the construction will be regularized on payment of the levy plus a surcharge of 10%. This will be addition to the existing compounding fee, etc.

Note: The building plans shall be sanctioned subject to certification by the Chief Town Planner, Local Body that up gradation of infrastructure and services has been done or are inexistence and layout/services plans revised in consonance with July 23,1998 Notification.

6 **Betterment levy/additional FAR charges and penalty/compounding charges:** Betterment levy or additional FAR charges in respect of additional construction shall be chargeable as follows:-

i. The plot owners/allottees seeking extra coverage, additional FAR or part thereof, over and above the original FAR, as has been provided in Notification dated 23.07.1998, Notification dated 22.09.2006 and Notification dated 26.11.14 shall be applicable, as per the FAR differences given in Table 3.1 & Table 3.2. and for charges refer Table 2 S. No.1.

ii. Plot owners/allottees seeking regularization of construction over the coverage allowed as per notification dated 23.07.1998 in terms of the additional coverage allowed under the Notification dated 26.11. 14, shall have to pay penalty/levy/betterment levy charges / compounding charges as mentioned in Table 2, S.No. 2 (a) & 2 (b).

iii. Plot owners/allottees seeking regularization of additional height in terms of notification dated 22.09.2006, shall have to pay penalty and special compounding as given in Table 2 S.No. 2(c) below:-

Table 2: Charges applicable for various colonies

| S. No. | Purpose | A & B Colonies | C & D Colonies | E, F & G Colonies: in plots more than 50 sq.m | E, F & G Colonies: in plots up to 50 sq.m |
|---|---|---|---|---|---|
| 1 | New Construction | 3500 /- | 1400 /- | 700 /- | 490 /- |
| 2 | Regularization of unauthorized construction | | | | |
| (a) | Additional Coverage within sanctioned height | 3500 /- | 1400 /- | 700 /- | 490 /- |
| (b) | Additional Coverage above sanctioned but within permissible height (as per 23.07.1998) | 4375 /- | 1750 /- | 875 /- | 613 /- |

| | | | | | |
|---|---|---|---|---|---|
| (c) | Additional Coverage beyond permissible height as per 23.07.1998 but within 15 m | 4900 /- | 1960 /-* | 980 /- | 686 /- |

*Rates in Rs. Per sq.m*

Height permissible as per notification dated. 23.07.98 is 12.5m

Note: The orders of Hon'ble Supreme Court, dated 14th March 2008, with regard to permissibility in respect of ground coverage, FAR and height according to building norms as per MASTER PLAN for DELHI – 2021 shall be applicable subject to the terms laid down in the above order (in the matter of M.C Mehta v/s UOI and others in IA nos.212-2212 in W.P (Civil) No. 4777 of 1985).

These charges shall be levied on difference in maximum ground coverage (%), FAR, number of dwelling units and height between notification dated 23.07.1998 and notification dated 26.11.14 are as given below:-

Table 3.1: Difference of FAR for various plot sizes (between Notification dt 23.07.98 and Notification dt. 22.09.06)

| S. No. | Area of the Plot (Sq. m.) | FAR as per Notification dt 23.07.98 | FAR as per Notification dt. 22.09.06 | Difference (FAR to be charged) |
|---|---|---|---|---|
| 1 | Below 32 | 225 | 350 | 125 |
| 2. | Above 32 to 50 | 225 | 350 | 125 |
| 3. | Above 50 to 100 | 225 | 350 | 125 |
| 4. | Above 100 to 250 | 200 | 300 | 100 |
| 5. | Above 250 to 500 | 150 | 225 | 75 |
| 6. | Above 500 to 1000 | 120 | 150 | 30 |
| 7. | Above 1000 to 1500 | 100 | 120 | 20 |
| 8. | Above 1500 to 2250 | 100 | 120 | 20 |
| 9. | Above 2250 to 3000 | 100 | 120 | 20 |
| 10. | Above 3000 to 3750 | 100 | 120 | 20 |
| 11. | Above 3750 | 100 | 120 | 20 |

Table 3.2: Difference of FAR for various plot sizes (between Notification dt 22.09.06 and Notification dt. 26.11.14)

| S. No. | Area of the Plot (Sq. m.) | FAR as per Notification dt. 22.09.06 | FAR as per Notification dt. 26.11.14 | Difference (FAR to be charged) |
|---|---|---|---|---|
| 1 | Below 32 | 350 | 350 | NIL |
| 2. | Above 32 to 50 | 350 | 350 | NIL |
| 3. | Above 50 to 100 | 350 | 350 | NIL |
| 4. | Above 100 to 250 | 300 | 300 | NIL |
| 5(a) | Above 250 to 500 | 225 | 225 | NIL |
| 5(b) | Above 500 to 750 | 150 | 225 | 75 |
| 6. | Above 750 to 1000 | 150 | 200 | 50 |
| 7. | Above 1000 to 1500 | 120 | 200 | 80 |
| 8. | Above 1500 to 2250 | 120 | 200 | 80 |
| 9. | Above 2250 to 3000 | 120 | 200 | 80 |
| 10. | Above 3000 to 3750 | 120 | 200 | 80 |
| 11. | Above 3750 | 120 | 200 | 80 |

Note: All fees and charges to be decided by concerned Sanctioning Authority as notified from time to time. Notwithstanding anything contained in this Annexure, in case of any repugnancy between the provisions of this Annexure and provisions of concerned Sanctioning Authority, the provisions of concerned Sanctioning Authority shall prevail over this Annexure.

# ANNEXURE -IV

**PENAL ACTION FOR VIOLATION OF PROVISIONS OF MASTER PLAN/ZONAL PLAN REGULATIONS/ BYE-LAWS** (Please refer clause 2.2, 2.7.7(b) & 2.8 of this document).

All fees and charges to be decided by Sanctioning Authority as notified from time to time

**(A) Non Compoundable Items:** Any deviations from the maximum, minimum prescribed limits regarding:-

1. No. of floors
2. No. of DUs &density
3. Parking norms
4. Light and ventilation provisions
5. Use premises
6. All other provision of these bye-laws except items given in para 'B' below shall not be compounded/ regularized and shall have to be rectified by altering/demolition at the risk and cost of owner. Besides this any other action as per terms &conditions of lease and provisions of Delhi Development Act, 1957 shall proceed.
7. Staircase.

**(B) Compoundable Items**

Sanctioning Authority shall be empowered after levying penalty to compound deviations from limits of coverage/FAR to the extent of 5% of the permissible coverage and FAR, a subject to maximum of 13.5 sq.m in building(s)/ premises at the time of considering the completion/occupancy certificate. In group Housing schemes and Public & semi-public facilities, 5% FAR beyond permissible FAR can be compounded by the Sanctioning Authority at the time of considering the completion/ occupancy certificate. The charges for compounding the deviation shall be as follows:

1. Up to 0.5% - same charges* as for permissible additional FAR.
2. Above 0.5 to 2.5% - 5 times the charges* as for permissible additional FAR.
3. Above 2.5% to 5% - 10 times the charges* as for permissible additional FAR.

* Charges as notified from time to time by the authority/ concerned local body

i. **Deviations in terms of covered area-** If a building or part thereof has been constructed unauthorized i.e. without obtaining the requisite building permit from the Sanctioning Authority as re¬quired under clause 2.0 of the building bye-laws, the same shall be compounded at the following rates provided the building or part thereof so constructed otherwise conforms to the provisions contained in the Building Bye-Laws and Master/Zonal Plan regulations. For this the owner shall have to submit the request for building permit in the prescribed procedure.

RATES (Prior to Sanction Charges)

a) Rs. 50 per sq.m of the covered area constructed unauthorized in residential building upto 500 sq.m plot size.

b) Rs. 200 per sq.m of the covered area constructed unauthorized in building categorized below:

(i) All Government Public and Semi-public and Utility buildings

(ii) Religious, Institutional &Educational Buildings

c) Rs. 500 per sq. m of the covered area constructed unauthorized

(i) Residential buildings above 500 sq. m plot size, Group Housing & Guest Houses

(ii) Industrial Buildings:

(iii) Storage buildings (underground or above ground)

d) Rs. 2000 per sq. m of the covered area constructed unauthorized:

(i) Commercial & Business Buildings

(ii) Cinema & Theatre Buildings

(iii) Petrol Pumps (filling/Service Stations)

(iv) Hazardous Building.

e) RATES (Pre- Occupancy Charges): Shall be charged on the covered area/built up area occupied without obtaining Completion cum Occupancy certificate:

a) Pre-occupancy charge @ Rs. 25,000/- per dwelling unit in case of Residential-Plotted or Group Housing.

b) For Mercantile/Commercial/ Industrial / Cinema / Petrol Pump/Hazardous building @ Rs. 2000/- per sq.m

c) For Institutional/Govt. /Religious/Public-Semi-Public/ Utility/Storage/ Others/ @ Rs. 500/- per sq.m

Note: a. The building not covered specifically under the above categories shall be compounded as decided by the Sanctioning Authority, considering the merit of each individual case.

b. Item which are exempted from the calculations of the coverage and FAR e.g. cup-boards, canopy, basement &mezzanine, loft, watchman cabins etc. but constructed unauthorized without obtaining prior permission from the Sanctioning Authority, but within the permis¬sible limits shall also be compounded/ regularized at the rate prescribed above.

c. Compounding at setback infringements

The infringement of the setback maximum to the extent of 0.3 m may be compounded by the way of levying compounding fees at the following rates:

| Infringements | Residential Buildings | Non-Residential Buildings |
|---|---|---|
| Up to 0.15 m | Rs. 1000 per sq. m of the area infringing the set back | Rs. 2500 per sq. m of the area infringing the set back |
| above 0.15 m | Rs. 2500 per sq. m of the area infringing the set back | Rs. 5000 per sq. m of the area infringing the set back |

**ii. Deviations of the building bye-laws other than as specified in (A) (Non- Compoundable).**

Deviations up to the maximum extent of 10% from the maximum/minimum prescribed limit (as prescribed by the building bye-laws) shall be compounded at the following rates:-

a. In case of deviations of areas of various components of the buildings, the rate of penalty will be @ Rs.100/- per 1 % of deviation.

b. For deviations in terms of height the penalty shall be @ Rs. 100/ -per 1 % of deviation' for every 10 sq.m or part there of the affected area.

c. Deviations from the prescribed limit of width: length penalty shall be @ Rs. 100/- per 1 % of the deviation for every 10 sq. m or part there of the affected area.

*Notes:*

1. *Notwithstanding the provisions above, no penalty shall be levied for the first 3% of deviation but in case deviation limit exceed 3% penalty shall be levied at the above rates for the total deviation up to 10%.*

2. *The penalties at the above rates as given in ii (a), (b) &(c) shall be charged for each deviation and for every component of the building separately.*

d. In case of increase in size of canopy in front open space from the prescribed limits of bye-laws, the same shall be charged @ Rs. 200/- per sq. m.

e. End walls up to 0.9 m in terrace type construction constructed purely as an architectural feature- Rs. 100/ -each.

f. Enclosing of front balcony by Jali wall which is being used as a part of stair-case¬ Rs. 2500/-Sq. m.

g. Toilet constructed without sanction on terrace (refer 7.2.2. f) – Rs.500/-per sqm.

h. All roof projections beyond permissible limit of bye-laws as specified shall be counted towards FAR calculations if otherwise the same do not infringe upon other bye-laws except the canopy as said in para (d) above.

j. Extra slab in mumty constructed without sanction shall be compounded at the rate given in (B) (compoundable item) provided it does not infringe upon the provision of any other bye-laws.

k. Partition walls provided without sanction at any floor if the same are not infringing upon the provision of any other bye-laws Rs. 150/- per sq. m of the surface area of the wall i.e. (length x height).

l. Projection on public land: -Not permitted.

# ANNEXURE-V

**DELHI FIRE SERVICE RULES, 2010 UNDER DELHI FIRE SERVICE ACT, 2007**

(1) **Rule 27: Classes of occupancies likely to cause a risk of fire** (Please refer clause 9.3 of this document)

The following classes of occupancies for the purposes of sub-section (1) of section 25 of the Act shall be construed to likely cause a risk of fire, namely:-

a) Pandal having seating capacity more than 50 persons or covered area more than 50 sq.m

b) Residential buildings (other than hotels and guest houses) having height more than 15 meters or having ground plus four upper stories including mezzanine floor.

c) Hotels and guest houses having height more than 12 meters having ground plus three upper stories including

mezzanine floor.

d) Educational buildings having height more than 9 meters or having ground plus two upper stories including mezzanine floor.

e) Institutional buildings having height more than 9 meters or having ground plus two upper stories including mezzanine floor.

f) All Assembly buildings.

g) Business buildings having height more than 15 meters or having ground plus four upper stories including mezzanine floor.

h) Mercantile buildings having height more than 9 meters or having ground plus two upper stories including mezzanine floor.

i) Industrial buildings having covered area on all floors more than 250 sq.m

j) Storage buildings having covered area on all floors more than 250 sq.m

k) All Hazardous buildings having covered area on all floors more than 100 sq.m

(2) **Rule 33: Minimum standards for fire prevention and fire safety for buildings**(Please refer clause 9.3 of this document)

The minimum standards for fire prevention and fire safety for buildings as may be applicable with reference to the height of the building and class of occupancy for the purposes of section 32 and section 35 of the Act shall be as are provided in the building bye-laws or National Building Code of India 2005 relating to the following matters:-

a. Access to building

b. Number, Width, Type and Arrangement of exits.

c. Protection of Exits by means of fire checks door (s) and or pressurization.

d. Compartmentation.

e. Smoke Management System.

f. Fire Extinguishers.

g. First-Aid Hose Reels.

h. Automatic fire detection and alarming system.

i. MOEFA.

j. Public Address System.

k. Automatic Sprinkler System.

l. Internal Hydrants and Yard Hydrants.

m. Pumping Arrangements.

n. Captive Water Storage for firefighting.

o. Exit Signage.

p. Provision of Lifts.

q. Standby power supply

r. Refuge Area.

s. Fire Control Room

t. Special Fire Protection Systems for Protection of special Risks,:

Provided that classes of occupancies or buildings or premises for which fire prevention and fire safety measures are not provided in the building bye-laws or National Building Code of India 2005, the Director may require owner or occupier of such occupancies or buildings or premises to provide fire prevention and fire safety measures in accordance with international standards as may be provided by the Fire Prevention Wing,:

Provided further that where the Government is of the opinion that it is necessary or expedient so to do, it may, by order, for reasons to be recorded in writing, relax or modify or annul any requirement concerning fire prevention and fire safety measures under these rules with respect to any class of occupancy in any building or premises in special areas or in respect of any building or premises in any area that was constructed or which was under construction prior to the date of enforcement of these rules.

(3) Where the Director is of the opinion that it is necessary or expedient so to do, it may, for reasons to be recorded in writing, require the owner or occupier of the buildings or premises to provide additional fire prevention and fire safety measures.

Note: Notwithstanding anything contained in this Annexure, in case of any repugnancy between the provisions of this Annexure and provisions of DELHI FIRE SERVICE RULES, 2010 under DELHI FIRE SERVICE ACT, 2007, shall prevail over this Annexure, as amended from time to time.

# ANNEXURE -VI

**Master Plan Delhi- 2021, Development Control (DC)#**

MPD 2021, provides the guide for the preparation of Layout Plans under the various regulations including norms for facilities and circulation system whereas Service Plans for the provision of physical infrastructure like, Water supply, Sewage, Drainage etc. have to conform to the Municipal Bye Laws as provided in the National Building Code. In case of Integrated Plan the Development Control as applicable to different land uses, are applicable on the total plot and subdivisions are for development purposes. While applying developmental polices and development controls for preparation of integrated schemes, MPD-2021 provisions are to be followed.

Where development control are not given for any use premises, the same can be formulated by the authority.

*# These have been reproduced from MPD 2021 and convenience/ reference only. MPD 2021 is amended by issue of Notification from Central Government from time to time. Thus, for the current status for any legal, official purpose the Notification issued by the Central Government to be followed.*

**Master Plan for Delhi -2021(MPD): –**The Development Code applicable for development is given in Master Plan Delhi (MPD)-2021.The purpose of the code is to promote quality of built environment by organizing the appropriate development of the land in accordance with the development policies and land use proposals contained in the Plan. The layout plans are prepared based on Development Control (DCs)/planning norms given in MPD

**Shelter (MPD 2021-Chapter 4)**

4.4.3Control for building/buildings within residential premises

**A. Residential plot- plotted housing**

Maximum ground coverage, FAR, number of dwelling units for different size of residential plots shall be as per the following table:

| Sl. No. | Area of the Plot (sq. m.) | Maximum Ground Coverage% | FAR | Number of DUs |
|---|---|---|---|---|
| 1. | Below 32 | 90* | 350 | 3 |
| 2. | Above 32 to 50 | 90* | 350 | 3 |
| 3. | Above 50 to 100 | 90* | 350 | 4 |
| 4. | Above 100 to 250 | 75** | 300** | 4 |
| 5. | Above 250 to 750 | 75 | 225 | 6 |
| 6. | Above 750 to 1000 | 50 | 200 | 9 |
| 7. | Above 1000 to 1500 | 50 | 200 | 9 |
| 8. | Above 1500 to 2250 | 50 | 200 | 12 |
| 9. | Above 2250 to 3000 | 50 | 200 | 15 |
| 10. | Above 3000 to 3750 | 50 | 200 | 18 |
| 11. | Above 3750 | 50 | 200 | 21 |

Notes:

1. The Local Body concerned shall be competent to disregard variation up to 2% in plot size, arising from conversion of area from sq. yard to sq.m. and to grant the norms applicable to the lower category of plot size in accordance to Para (ii) below
2. *100% ground coverage shall be eligible for regularization of construction, already existing as on 22.09.06 on payment of charges as notified.
3. Minimum size of the residential plot shall be 32 sq.m. However, in case of Government sponsored economically weaker section schemes, size could be reduced further.
4. **100% ground coverage and 350 FAR shall be eligible for regularization of construction already existing as on 22.09.06 on payment of charges as per the notification, in respect plot size between 100 to 175 sq.m.
5. Permissible FAR and dwelling units shall not be less than MPD – 2001 norms.

**Terms and conditions:**

i. The additional number of dwelling units would be subject to payment of levy for the augmentation of civic infrastructure.

ii. The total coverage and FAR permissible in any plot in a category, shall not be less than that permissible and available to the largest plot in the next lower category.

iii. Height: the maximum height for building shall be 15m in plots without stilt parking and 17.5m in plots with stilt parking. Such residential building shall not be considered as high rise building. For purpose of fire and life safety requirements, clearance of Fire Department will be obtained by the individual plot owner.

iv. Subdivision of plots is not permitted. However, if there are more than one buildings in one residential plot, the sum of the built up area and ground coverage of all such buildings, shall not exceed the built up area and ground coverage permissible in that plot.

v. The mezzanine floor, and service floor, if constructed, shall be counted in the FAR.

vi. Basement: Basement shall not be counted towards FAR if used for purposes permissible under building bye laws namely household storage and parking. Basement area shall not extend beyond the coverage on the ground floor as per permissible and sanctioned built up area, but may extend to the area below the internal courtyard and shaft. Basement if used in terms of chapter 15.0 Mixed Use Regulations (MPD- 2021) shall count towards FAR and shall be liable to payment of appropriate charges, if it exceeds the permissible FAR.

vii. Stilts: If the building is constructed with stilt area of non-habitable height(less than 2.4 m), used for parking, such stilt area shall not be included in FAR but would be counted towards the height of the building.

viii. Parking: parking space shall be provided for within the residential plot as follows:

a. 2 Equivalent Car Space (ECS) in plots of size 250-300sq.m.

b. 1 ECS for every 100sq.m. built up area, in plots exceeding 300 sq.m, provided that, if the permissible coverage and FAR is not achieved with the above mentioned parking norms in a plot, the parking norms of the preceding category shall be allowed.

ix. Density: for the purpose of density calculations, the dwelling unit shall be considered to accommodate 4.5 persons and the servant quarter to accommodate 2.25 persons.

x. The minimum setbacks shall be as given in the following table:

| **S.No.** | **Plot size (in sq.m.)** | **Minimum Setbacks ( in meter)** | | | |
|---|---|---|---|---|---|
| | | Front | Rear | Side(1) | Side(2) |
| 1 | Below 100 | 0 | 0 | 0 | 0 |
| 2 | Above 100 and up to 250 | 3 | 0 | 0 | 0 |
| 3 | Above 250 and up to 500 | 3 | 3 | 3 | 0 |
| 4 | Above 500 and up to 2000 | 6 | 3 | 3 | 3 |
| 5 | Above 2000 and up to 10000 | 9 | 6 | 6 | 6 |
| 6 | Above 10000 | 15 | 9 | 9 | 9 |

a. In case the permissible coverage is not achieved with the above mentioned setbacks in a plot, the setbacks of the preceding category may be allowed.

b. In the case construction in the future, a minimum 2mx2m open courtyard shall be provided for in residential plots of area of 50 sq.m to 100 sq.m.

xi. Number of servant quarters shall be provided as per approved layout plan and shall be constructed within the stipulated height. However, if the garage block space is merged with the main building, no separate servant quarter block or servant quarter as part of main building shall be allowed. However, provision for a servant's room as part of the dwelling unit within the permissible coverage FAR shall be allowed.

xii. Each servant quarter shall comprise of one habitable room of area not less than 11 sq.m. Floor area exclusive of cooking, verandah, bathroom and lavatory. The maximum size of the servant quarter shall be 25 sq.m If larger in size, the servant's quarter shall be counted in density as a full dwelling unit.

xiii. Plot owners/allottees seeking extra coverage, additional floor or part thereof over above gazette notification dated 23.07.98 as per above mentioned norms shall be charged betterment levy (or additional FAR charges) at the rates notified with the approval of the Government from time to time. This is an addition to the levy payable on the additional FAR allowed vide notification dated 23.07.98 and over the FAR allowed vide notification dated 15.05.95.

xiv. Plot owners/allottees seeking regularization of construction in terms of the additional coverage allowed under this

notification shall have to pay a penalty and compounding charges notified with the approval of the Government, over and above the betterment levy referred in Para xiii above.

xv. Plot owners/allottees seeking regularization of additional height in this notification, will have to pay penalty and special compounding charges notified with the approval of the Government, in addition to betterment levy referred to in Para (xiv). – UBBL no 2.15

xvi. The amount so collected be deposited in an escrow account by the local body concerned for incurring expenditure for developing parking sites, augmentation of amenities/infrastructure and environmental improvement programmers' and a quarterly statement of the income and expenditure of the account shall be rendered by the local bodies to the Government.

xvii. Encroachment on public land shall not be regularized and shall be removed before the local body grants sanction for regularization of additional construction or height except following:

a. Projections/chajjas/covered chajjas built up portion which existed before 7.2.2007 up to 1 m above 3 m height from the ground level shall be regularized for plot size up to 175 sq. m on roads below 24 m. ROW on pre 1962 colonies (except for A and B category) already notified by MCD, in unplanned areas (including special areas, village abadi and unauthorized regularized colonies) and resettlement colonies. The owner/occupier shall have to obtain structural safety certificate and fire clearance within a reasonable period of time notified by Government. Such projections/built-up portion thereon shall be counted in FAR and in case of excess FAR over and above permissible FAR, such FAR in excess shall be regularized subject to payment of appropriate charges as approved by the Government.

b. The Local body concerned shall carry out survey within a period of two months from the date of notification of all such projections eligible to be regularized and put such a list in public domain for objections from the occupiers/owners and any person of the public against inclusion /exclusion of such projection in the list and the list thereafter will be finalized within a period of one month after considering such objections received in writing.

xviii. Every applicant seeking sanction or regularization of additional FAR and /or height shall submit a certificate of structural safety obtained from a structural engineer. Where such certificate is not submitted or the Building is otherwise found to be structurally unsafe, formal notice shall be given to the owner by the local body concerned, to rectify the structural weakness with a reasonable stipulated period, falling which the building shall be declared unsafe by the local body concerned and shall be demolished by owner or the local body.

xix. **Standard Plan:** - There are number of standard building plan design and approved by the authority/ Concerned Local Bodies, such plans would be given relaxation wherever applicable. However, these may be modified as per the applicable Development Control Regulations.

xx. Amalgamation of the two plots up to 64 sq.m maximum will be permitted with following conditions:

- Local Body will simultaneously modify the Layout Plan.
- The maximum Ground Coverage, setbacks, parking, Dwelling Units etc. shall be for the amalgamated plot size.
- The maximum FAR permissible shall not be less than the permissible is case of two individual plots.

**B. Residential Plot - Group Housing**

Minimum size of plot: 3000 sq. m

Maximum Ground Coverage: 33.3 %

Maximum FAR: 200

Height: - No Restriction (Subjected to clearance from AAI/Fire Department and other statutory bodies).

Parking - 2.0 ECS/100 sq.m built up area and 0.5 ECS/100 sq.m for EWS/Service Personnel housing.

i. The upper limit of density be taken as 200DUs/ha.(900pph) with flexible Dwelling Unit sizes to achieve optimal of land. The density of Slum & JJ clusters (In-situ up gradation/Rehabilitation/Redevelopment of slum & JJ clusters, Resettlement Colonies) and EWS Public Housing Schemes be maximum 900DUs/ha

ii. Plots for group housing should be located on roads facing a minimum width of 18 m ROW (7.5m ROW for redevelopment areas/Rehabilitation Area/Special Area/Village (Lal Dora/Firni)/Extended Lal Dora).

iii. Additional floor area minimum 400 sq.m or at rate of 0.6% of permissible FAR shall be allowed free from FAR to cater to community needs such as community/recreational hall, crèche, library, reading room, senior citizen recreation room/club and society office.

iv. The Central Government in consultation with the DDA may relax density and other norms for public housing and projects of national importance.

v. The developer shall ensure that minimum 15% of the proposed FAR to be constructed for Community-Service Personnel / EWS and lower category. Such flats should have a carpet area between 4(25 - 40 sq.m.). This 15% of the proposed FAR for Community Service Personnel / EWS and lower category housing would be over and above 200 Permissible FAR and density of 200DUs. Employer Housing of Central Government, State Government and other Government Agencies, are not required to follow the requirement of FAR or Dwelling Units for Community Service Personnel / EWS and lower income category. 50% of the EWS Housing Stock shall be retained by Developer Entity (DE) and disposed only to the Apartment owners, at market rates, to house Community Service Personnel (CSP) working for the Residents/Owners of the Group Housing. These will be developed by DE at the respective Group Housing site/premises or contiguous site. Remaining 50% of DUs developed by DE to be sold to DDA for EWS housing purpose will be sold to DDA/Local Bodies at base cost of Rs. 2000 per sq. ft. as per CPWD index of 2013 (plus cost of EWS parking) which shall be enhanced as per CPWD escalation index at the time of actual handing over and can be developed by DE at an alternate nearby site. Necessary commercial and PSP facilities shall also be provided by DE for this separate housing pocket. The EWS housing component created by the DE shall be subject to quality assurance checks, as prescribed in this regard by Govt./DDA. The final handing/taking over of this component shall be subject to fulfilling the quality assurance requirements. The DE shall be allowed to undertake actual transfer/transaction of saleable component under its share/ownership to the prospective buyers only after the prescribed land and EWS housing component is handed over to the DDA.

vi. Ground coverage up to 40% may be allowed to achieve low- rise high – density housing without lifts.

vii. Levy on additional FAR shall be rates notified with the approval of Government from time to time.

viii. Stilts: if the building is constructed with stilt area of non – habitable height and is proposed to be used for parking, landscaping etc. the stilt floor need not be included in FAR and shall be counted towards height.

ix. Basement, if constructed, and used only for parking, utilities and services shall not be counted towards FAR.

x. In case of Redevelopment Areas/Rehabilitation area/Special Area/Village (Lal Dora/Firni)/Extended Lal Dora, the minimum size of plot for Group Housing shall be 1670 sq.m. (2000 sq. yds.) on roads having a minimum width of 7.5m ROW subject to meeting parking requirements within the plot and NOC from the Traffic Police Deptt. and the Fire Deptt. of GNCTD. Such plots shall be incorporated as group housing plots in the Development/Layout Plans of these areas to be prepared, subsequently, if such, plans are not already approved.

**C. Cluster Court Housing**

Minimum size of plot: - 3000Sq.m.

Maximum FAR: - 175

Maximum height: - 15.0m with maximum coverage 100% subject to light and ventilation condition.

i. The net housing density permissible shall be 225 DUs per Ha. With 15% variation on either side and could be averaged for more than one pocket.

ii. Minimum Street in front of pocket to be 12 m.

iii. No projection outside the building envelope allowed

iv. Each cluster court house is for one dwelling for a single family.

v. Basement:

a) Basement if constructed shall not be included in FAR calculations.

b) Basement shall be below the ground floor. Basement area may, however, be extended below the internal courtyard and shaft.

vi. Stilts: if the building is constructed with the stilt area of non – habitable height and is proposed to be used for parking, landscaping etc., the stilt floor need not be included in the FAR but would be counted towards height(within stipulated height

vii. Parking: parking shall be provided as per group housing norms.

viii. Density: for the purpose of density calculations, the dwelling unit shall be considered to accommodate 4.5 persons and the servant quarter to accommodate 2.25 persons.

ix. Servant quarter: no separate servant quarter block or servant quarter as part of main building shall be allowed if the garage block space is merged with the main building. Provision for a servant's room as part of the dwelling unit within the permissible coverage and FAR shall be allowed with maximum size of servant quarter as 25 sq.m and if larger in size would be counted as a full dwelling unit.

**D. Foreign Mission**

| | |
|---|---|
| Maximum Ground coverage | 25% |
| Maximum FAR | 75 |
| Maximum Height | 15m |

Basement up to the building envelope line to the maximum extent of 50% of plot area shall be allowed and if used for parking and services should not be counted in FAR.

**E. Hotel/Guest House/Lodging & Boarding House/ Dharamshala**

Min. Plot size 500sqm.

Maximum Ground Coverage 30%

Maximum FAR 120

Maximum Height 15m

i. Parking to be provided @ 2ECS per 100sq. m. of built up area.

ii. These norms shall not be applicable for Guest House under Mixed Use Regulation

**F. Night shelter**

Min. Plot size 1000sqm.

Maximum Ground Coverage 30%

Maximum FAR 120

Maximum Height 26m

**G. Low Density Residential Area**

| | | |
|---|---|---|
| i | Minimum Plot Area | 0.4 hectare |
| ii | Max. FAR | -20 (without any charges) |
| | | -above 20 up to 30(with additional charges to be notified by the competent Authority |
| | | -For plots more than 1 acre, the portions remaining (if any) after plot subdivision will get the benefit of FAR only on prorate basis. |
| iii | Max. height | 12 meter |
| iv | Min. width of continuous road in front | 6 meter * |
| v | Min. green area | 50% |
| vi | No. of main Dwelling units permitted | -<br>Two Dwelling Units on LDRA plot of one acre (0.4 ha) may be permitted with FAR of 20 and for additional 10 FAR i.e. from 20 to 30 one additional Dwelling Unit is allowed subject to payment of requisite charges as approved and notified by Government of India ] |
| | | -EWS unit is 60sqm per acre in addition to permitted FAR. |

**Other controls:-**

i. Where the property abuts urban road, the dwelling house building should be setback from the Centre line of that road by 30m. Where the property abuts village road, the building setback from the Centre line of that road should be 15m in the front side and 5m in the three sides.

ii. For dwelling unit on National Highway, the prescribed norms of NHAI will be applicable.

iii. For infrastructure roads etc. land holders will be required to cede land to enable the building up of infrastructure after Public notice and hearing by the Authority.

iv. Every part of the building including the basement used for normal habitation will be counted in FAR. Basement used for recreational purpose, home, office, storage, parking services and utilities installation will not be counted in FAR.

v. Pool/pond/water bodies are permitted and excluded from FAR setback norms.

vi. The watch & ward unit will be permitted adjacent to boundary or entrance gate as per provision of building bye laws and it is to be excluded from the FAR and setback norms.

vii. For plots 0.4 to 2 hectare, the use activities such as fitness/wellness Centre's, Naturopathy clinics may be allowed subject to the condition that minimum 50% of plot area be left for soft parking and landscaping. For activities permitted, provision of parking must be ensured within the plot.

viii. Apart from use/activities permitted in (vii) above, for plots more than 2.0ha (5acres) located on roads of minimum width of 18m. use/activities such as recreational/club may be allowed subject to the conditions that minimum 50% of plot area be left for soft parking, maximum 25% of plot area for landscaping and maximum 25 % of the plot area for functions/building purposes.

ix. No low density residential premises should be built on lands notified for acquisition, the legality of which has been upheld by the Hon'ble Supreme Court except it falls within the boundary of an unauthorized colony listed for regularization as per Union Government's decision of 8th Feb, 2007 in accordance with the regulations No. S.O 683 (E) dated 24.03.2008 pertaining to regulation of unauthorized colonies or unless the acquisition is denotified.

x. Rain water harvesting and waste water recharging shall be mandatory with provision for storage for surface run-off water to improve the depleting ground water levels.

* In certain cases where access to Farm Houses/Country Homes is only by private road or exceptionally restricted by the Dead end Road, the Road width will be governed as per the sanctioned layout plan. For the purpose of subdivision of land which is minimum 2 acres and above, an internal road of minimum width 6m may be planned as a feeder to the subdivided plots (of minimum 1 acre each). Such plots will get benefit of FAR and Ground coverage on proportionate land surrendered for planning of such roads. Necessary provision shall be made by the plot owner for parking of emergency vehicles like Police, Ambulance, Fire tender etc. Owner is required to submit an undertaking along with proposal and plans for sanction of Country Home to Local Authority about his willingness to surrender land for road widening. Reference of this undertaking shall be recorded on plan by Local authority while releasing the plan.

**H. Studio Apartments:**

| | |
|---|---|
| Minimum size of plot | 2000 sqm. |
| Maximum Ground Coverage | 33.3% |
| Maximum FAR | 200 |
| Height | NR (Subject to clearance from AAI/Fire Department and Other Statutory bodies) |
| Parking | 2.0 ECS/100 sqm built up area |

Other controls for studio apartments:

i. The maximum size of the apartment will be 60 sqm built-up .

ii. The plots should be located on road facing minimum width of 12m

iii. Basement, if constructed, and used only for parking, utilities and services shall not be counted towards FAR

Table 5.4Development controls- Commercial Centers

| Use / use premises | Max. Cov. (%) | FAR | Height (mts.) | Parking Standard ECS/100 sq.m. of floor area. | Other controls |
|---|---|---|---|---|---|
| *a) Commercial Centers*<br><br>i. Convenience Shopping Centre/Local Shopping Centre/ Local Level Commercial areas.<br>ii. Service Market<br>iii. Organized informal Bazaar<br>iv. Community Centre/Non hierarchical Commercial Centre<br>v. District Centre/Sub Central Business District/Sub-City Level Commercial areas. | 40<br>40<br>40<br>25<br>25 | 100<br>100<br>40<br>125<br>150 | 15<br>15<br>8<br>NR*<br>NR* | 2<br>2<br>-<br>3<br>3 | Max. 10% additional Ground Coverage shall be allowed for providing atrium only in LSC.<br>Maximum 10% additional ground coverage shall be allowed for providing atrium.<br>Maximum 10% additional ground coverage shall be allowed for providing atrium. |
| *b) Metropolitan City Centre/ Central Business District*<br>i. Commercial Plot: Retail & Commerce Metropolitan City Centre i.e. Connaught Place & its Extension.<br><br>ii. Commercial Complex at Fire Brigade Lane and Janpath Lane. | 25<br><br>25 | 150<br><br>150 | NR*<br><br>NR* | 3<br><br>3 | i. The size of the plot shall be as in the layout of commercial area and any sub division of the plot in Connaught Place and its extension should not be permitted.<br>ii. The development controls shall be in accordance with the comprehensive plan of the area to be reframed by the local body.<br>iii. (a) In case of Connaught Place, the existing Height shall be maintained and FAR could be achieved by increasing proportionate ground coverage.<br>(b) No basement hall be permitted in middle circle of Connaught Place.<br>(c) Mandatory Architectural Controls shall be applicable.<br>i. Ground Coverage and FAR shall be calculated on the area of presently available plots.<br>ii. The area shall be developed on the basis of comprehensive scheme. |
| *c) Hotel* | 40 | # Plot below 30 m ROW – 325 (ii) Plot 30 m & above – 375 | NR* | 3 | i. Maximum 10% additional ground coverage shall be allowed for providing atrium. In case, the permissible additional ground coverage for atrium is utilized, 25 % of the utilized ground coverage shall be counted towards FAR.<br>ii. Maximum 20 % of the FAR can be used for the Commercial offices, Retail & service shops.<br>iii. The enhanced FAR will be allowed subject to payment of charges to be prescribed/ notified by the Government. |

| | | | | | |
|---|---|---|---|---|---|
| *d) Service Apartments* | 30 | *225 | NR* | *2 | |
| *e) Any other Commercial Centre*<br>I. (Including Commercial component along with Railway/MRTS Station/ ISBT)<br>II. Asaf Ali Road (the area shown as commercial strip in Delhi Gate – Ajmeri Gate Scheme). | 25<br>80 | 100<br>200 | NR*<br>20 | 3<br>3 | Subject to statutory clearances. The development controls can vary subject to approved scheme.<br>Setbacks are not mandatory<br>In case of rebuilding stilts shall be provided for parking. |

| | | | | | |
|---|---|---|---|---|---|
| *f) Motels*<br>(with sanctioned plans as on 07-02-2007 or whose proposal of Motel has been acceded to, (including all such proposal of motels which were in process of examination or matter challenged in the court of law or having approval in files from DDA or MCD or not acceded to due to enforcement of MPD-2021 on 07.02.2007 are also eligible for sanction)which are in Commercial Areas or Proposed Facility Corridor in Zonal Development Plans and Other use Zones) | 40 | 175^ | NR* | 3.0 ECS per 100 sq.metres of floor area (as per Development Code Chapter of MPD – 2021) All guest parking must be catered to within the motel premises themselves | i. Maximum 175 FAR as applicable to plot area of one hectare shall be permissible on the plot area disclosed in the sanctioned plan as on 07-02-2007 in conformity with Government of India Notification S.O. 550 (E) dated 16-06-1995 and motel guidelines issued by Government of India, MoUD on 04-03-2002.<br>ii. The motels shall face the road of minimum 30 mts. ROW (if additional land is required for road widening, same to be kept reserved out of the motel area).<br>iii. Other norms and permissible activities shall be the same as applicable to hotel use premise.<br>iv. Water, Electric supply, Sewerage, drainage, traffic circulation, provision of linking road of adequate ROW and other such infrastructure shall have to be provided by the owner at their own cost till the same is made available by the service providing agencies. The Motel owner will have to pay the external development charges including provision of linking road of adequate ROW as demanded by the concerned agencies.<br>v. All motels should follow rainwater harvesting and energy conservation provision laid down under Notification and Building Bye-Laws issued by MoUD/GOI.<br>vi. Disposal of waste in Motels will be responsibility of the Motel owner and net pollution discharge from the Motels should be zero.<br>vii. Modern techniques shall have to be adopted in disposal of waste in motels viz. segregation of solid waste into compostable and non-compostable. Compostable waste should be deposited in localised compost pits; non-compostable should be incinerated in incinerators maintained by the Motel, subject to pollution control norms. The Building shall have dual piping system. Mini sewage treatment plant shall be constructed within premises for treatment of sewage and utilising the treated water for purposes other than drinking, with dual piping system.<br>viii. Revised building plans will be submitted to the local bodies i.e., MCD/DDA as the case may be for sanction under Building Bye-Laws. |

Note- Additional FAR charges, conversion charges, betterment charges, betterment levy/external development charges etc. shall be payable as decided by the government from time to time.

No restriction subject to clearance from Airport Authority of India and Fire Department of GNCTD.

i. NR* - No Restriction, subject to clearance from AAI, Delhi Fire Service and other Statutory bodies.)

ii. FAR# , The norms of 325 FAR below 30m ROW or 375 FAR on 30m ROW or above and 40 % ground coverage shall be applicable in respect of all (I) hotels including hotel plots in (a) Commercial Centers ((iv), (v) and (b) Metropolitan City Centre/Central Business District except those located in LBZ area, Civil Lines, Bungalow Area and hotels existing on heritage structures and (II) Hotel-cum-commercial plots. This shall apply to all categories of hotels Mentioned at para 5.8. The FAR for Commercial Centers mentioned at Table 5.4 (a) and (b) as well as Hotel-cum-commercial plots where apportionment of FAR shall be as per original lease conditions and shall stand enhanced automatically to that extent, for this purpose only if not available.

iii. In case of revision of building plans to avail additional FAR, hotel can avail additional FAR only if adequate parking provision is made within the plot itself.

@ - In respect of hotels where the building plans stand sanctioned prior to 27.1.2006, parking standard of 3 ECS for 100 sqm of floor area shall be applicable only for the additional FAR which will be availed consequent upon amendment to MPD-2021. In respect of hotels where the building plans have been sanctioned on or after 27.1.2006, the parking standard of 3 ECS for 100 sqm of floor area shall be applicable to the entire plot.

**Notes:-**

i. The utilities such as, underground water storage tank, roof top water harvesting system, separate dry and wet dustbins, post-delivery counter etc. are to be provided within the plot. All hotels, restaurants, auto workshops, hospitals 1[/tertiary health care centres] etc. will have to make arrangements for solid waste disposal and primary effluent treatment.

ii. Individual plot with floor area of 5000 sq. mt. or above will provide ESS and generator within the plot. They have to submit energy consumption / audit at the time of sanction of building plans.

iii. Height subject to clearance from ASI, Airport Authority of India, Delhi Fire Service and concerned authority.

iv. Wherever parking is provided within the plot / basement and is misused, the same is liable to municipalisation / taken over by the Authority.

v. Wherever redevelopment of existing commercial areas stipulate preparation of a comprehensive scheme, the same can be initiated jointly by the lessees / owners themselves and submitted to land owning agency / Planning Authority for approval. Wherever any enhancement in FAR is approved, the same will be subject to charging appropriate levies from the beneficiaries. For Metropolitan City Centre and, in Special Area, Development Control is as per approved scheme.

** Ground Coverage up to 50% instead of 40% will be permissible to achieve the enhanced FAR at site(s), if their exist any height restriction from Airport Authority of India.

<u>Wholesale Trade (MPD 2021 Chapter 6)</u>

Table 6.2: Development Controls – Wholesale Trade

| Use/Use Premises | Maximum | | | Parking Standard ECS/100 sq. mt. of Floor area | Definition | Activities Permitted |
|---|---|---|---|---|---|---|
| | Ground Coverage (%) | FAR | Height (m) | | | |

| Use/Use Premises | Maximum | | | Parking Standard ECS/100 sq. mt. of Floor area | Definition | Activities Permitted |
|---|---|---|---|---|---|---|
| Integrated Freight Complex/ Wholesale Market | 30 | 80 | No Restriction Subject to (i) | 3 | Wholesale Market. A premise from where goods and commodities are sold and delivered to retailers. The premises include storage and godown, loading and unloading facilities. | Wholesale shop, Godown and storage and Commercial Office (Restricted to 25% of the total floor area, Night Shelter |

**Notes:**

i. Height permitted subject to clearance from Airport Authority of India, Fire Department and other statutory bodies.

ii. In case of plots up to 300 sq. mt. Common parking is to be provided.

iii. In case of plots of 300 sq. mt. and above, the utilities such as E.S.S. underground water storage tank, roof top water harvesting system, separate dry and wet dustbins, solar heating /lighting system etc.; are to be provided within the plot.

iv. In case of individual plots not forming part of any comprehensive integrated development scheme, the Development Control Regulations shall be as per already approved scheme/layout plan.

**Industry (MPD 2021 Chapter 7)**

Table 7.3 Development Control Norms

| Use Premises | Maximum | | | Parking standard ECS/100 sqm of floor area | Activities permitted | *Definition |
|---|---|---|---|---|---|---|
| | Gr. Cov(%) | FAR | Ht(m) | | | |
| Industrial plot<br>i. 50 sqm and below.<br>ii. 51 sqm to 400 sqm.<br>iii. 401 sqm and above | <br>100<br>60<br>50 | 200<br>180<br>150 | 8<br>15<br>15 | 2<br>2<br>2 | Industrial unit's sales outlet and administrative office up to maximum 10% of floor area on ground floor only; residential flat up to the maximum extent of 5% of the floor space or 50sqm. Whichever is less for watch & ward and supervision, incidental storage [-] related to the industry activity, commercial activity as per footnote (vi). | *A premise for industrial activity with non-hazardous non-polluting performance. |
| Flatted group industry (Minimum plot size – 400 sqm.) | 30 | 150 | 26 | 2 | Industrial units; administrative office, watch and ward, maximum up to 5% of floor area or 20sqm. Whichever is less, storage related to the manufacturing activity, commercial activity as per note (vi). | *A premises having a group of small industrial units with common services and facilities of non-polluting nature |

**Notes:-**

i. In case of plots up to 60 sq. mt. common parking shall be provided.

ii. In case of plots of size 500 sq.mt. And above, the utilities such as E.S.S. underground water storage tank, roof top water harvesting system, separate dry and wet dustbins, solar heating/ lighting system etc. shall be provided within the plot.

iii. Identified Service Centers shall be planned as per plotted industrial area norms.

iv. Development of IT hardware and software permissible under industrial use.

v. Banquet hall shall be permissible in Industrial premises subject to specifications/ regulations as may be prescribed, along with conversion charges as prescribed by the Government from time to time

vi. Industrial units/ plots abutting roads of 24 mt. ROW and above shall be eligible for conversion to commercial use within the existing development control norms, subject to payment of conversion charges computed on current market value of commercial area and cost of parking as decided by the Government from time to time The activities permissible in community Centre will be permitted in such plots]. In addition, multilevel parking shall be permissible activity. However, this shall not be permitted on non-conforming/regularized industrial cluster. The above provision shall not affect the Supreme Court orders in any way.

vii. Industrial plots abutting roads of 24m ROW and above shall be eligible for conversion to Hospitals (up to 100 beds) within the existing development control norms, subject to the condition

a. The number of beds to be accommodated on a plot shall be worked out @ 80sqm of gross floor area per bed and

b. Payment of conversion charges as prescribed by the government from time to time. The activities permissible in hospital (table 13.20) shall be permitted in such plots. However, this shall not be permitted on non-conforming/regularized industrial cluster. The above provision shall not affect the Supreme Court orders in any manner.

viii. In the redevelopment of industrial plots, 1.5 times of permissible FAR has already been notified in notification S.O.683 (E ) dated 01.04.2011 regarding Regulations and guidelines for existing planned Industrial area, therefore the incentive of 1.5 times of permissible FAR shall be allowed on all permissible uses on industrial plot.

ix. Banquet hall, restaurant, recreational club, hostel & old age home, community and recreational hall, nursing home & health Centre are permitted as part of modification in layout plan of industrial area where also enhanced FAR 1.5 times of permissible FAR of respective use shall be allowed.

x. As per the notification S.O. 683(E) dated 01.04.2011, minimum plot size eligible for redevelopment is given 1000sqm. Wherever some of the plots are less than 50-100sqm. From area limit of 1000sqm. In such redevelopment relaxation in area up to 5% in lower limit of plot size shall be permitted.

xi. The development control norms i.e. Ground Coverage, FAR etc., of respective use premises while allowing redevelopment/reconstruction on the individual industrial plots shall be adhered to and there shall be no height restriction. The height shall be as per requirement of AAI/Fire Department. In case of addition, alteration or change of use within permissible category in existing building to achieve permissible FAR, already sanctioned ground coverage shall continue, if parking requirement or sufficient open space around building is made available.

xii. In existing industrial units/plots with an area of 3000sqm. Or above abutting road of 24mtrs. ROW and above shall be eligible for residential use (group housing) within development control norms of group housing along with incentive 1.5 times FAR of permissible FAR of group housing subject to payment of conversion charges as prescribed by the Government from time to time for respective use, required commercial preferably and PSP activity for residential population, and work space up to 15% of permissible FAR shall also be allowed. Sub-division of larger

industrial plot or amalgamation of smaller industrial plots will be allowed in existing areas as well as approved schemes/layouts/building plans on these industrial plots. Rain water harvesting preferably with Rain water storage for re-use & STP. Dual piping system use of solar electricity shall be provided to minimize the additional burden on infrastructure services. This shall not affect any Court Orders.

Government Offices (MPD 2021 Chapter 8)

Table 8.2 Development Controls- Govt. offices

| Use/Use Premises | Maximum | | | Parking Standard ECS/100 sq. mt. of Floor area | **Definition** | **Activities permitted** |
|---|---|---|---|---|---|---|
| | Ground Coverage (%) | FAR | Height (mt.) | | | |
| i) Integrated Office Complex | 30 | 200 | NR, Subject to approval of AAI, Fire Department and other statutory bodies. | 1.8 | Premises used for the office of Central Government, Local Government and Local Bodies. | Government Offices, Watch and Ward Residence / residential maintenance staff (maximum 5% of FAR), Retail shop of Chemist, Book and stationery, Consumer Store, Canteen, Post office, Bank Extension Counter etc.<br>Public sector Undertaking / Commercial offices (restricted to 10% of the total floor area) |
| ii) District Court | 30 | 200 | NR, Subject to approval of AAI, Fire Department and other statutory bodies. | 1.8 | Premises used for the offices of Judiciary. | Court, Residential maintenance staff (maximum 5% of FAR), Canteen, Restaurant, Ancillary services and Retail shop, Library, Dispensary, Administrative offices, Banks, Post offices, Police post, Fire post, Lawyer's chamber. |

**Notes:-**

(i) The norms for Local Government Offices/Public Sector Undertakings under Government Land use shall be as per integrated office complex.

(ii) The norms of Government use (undetermined) shall be as per approved layout/scheme, which development controls shall be as per respective use premises.

**Environment (MPD 2021 Chapter 9)**

**9.5 Amusement Park**

Amusement park up to 10 HA. May be permitted in District Park following development controls shall be applicable

i. Max. Ground Coverage – 5%

ii. Max. FAR – 7.5

iii. Max. Height – 8 mt

iv. Parking – 3 ECS/100 sqm. of floor area with the stipulation to provide min. parking for 100 cars.

Development of green areas such as city park, district park, community park at sub city level, neighborhood park, housing area park, tot lot at housing cluster level at neighborhood level and city multipurpose ground, district multipurpose ground and community multipurpose ground for multipurpose grounds, the norms in terms of plot area and the population along with control for these Use for soft parking or other activities are given under table 9.1, 9.2& 9.3 of chapter 9, MPD-2021.

Multi-gyms would be permissible in parks having an area of one ha. and would have built-up area up to 225 sq.m

**9.7 Bio-diversity Park**

The activities and development control norms permitted in Bio-diversity Parks are as under:

Orchards, Specialized Parks like Butterfly Parks, Fernarium etc. Facilities for Flora & Fauna, Water Harvesting Structures, Open Air-Theatre, Food courts, Scientific Laboratories, Interpretation Centre, Administrative Office, Camping Site., Amenity Structures – Toilet Block, Pump Room, Electric Room, Guard Room and Equipment Room.

a. Maximum Permissible Area of built structures shall be 0.5% of Biodiversity Park area or 10000 sqm., whichever is less.

b. Building within the Bio-diversity parks would be restricted to 2 storeys with a maximum height of 12 m for sloping roof structures and should meet "green building" criteria (Griha 4 star rating).

c. Parking may be provided in the lots of 20 to 25 ECS at different locations, as per requirement.

**Transportation (MPD 2021 Chapter 12)**

**12.12.2 Fuel Stations**

The regulations for locating the fuel stations –cum-service stations, the development control and permissibility shall be governed by the policy /decision by competent Authority / Government Notifications issued from time to time. New fuel stations shall be regulated by the following controls:

i. Fuel stations shall be located on roads of minimum 30m ROW.

ii. The plot size for fuel stations shall be minimum of 30m X 36m and maximum of 33m X 45m (75m X 40m for CNG mother station as per requirement).

iii. The minimum distance of plot from the road intersections shall be as follows:

   a. For minor roads having less than 30m ROW- 50m.

   b. For roads of ROW 30m or more- 100m

   c. Frontage of plots should not be less than 30m.

iv. Maximum Ground Coverage: 20%, Maximum FAR: 40

v. Maximum Height: 6m

vi. Canopy: equivalent to ground coverage within set back.

vii. Maximum 10 FAR permissible for non-inflammable, non-hazardous commercial activities subject to payment of conversion charges/ levies as may be prescribed by the government from time to time.

viii. In case of existing petrol pumps the provision of maximum 10 FAR for commercial activity would be permissible only to those fuel stations / petrol pumps which conform to the controls given in i, ii, and iii, above subject to payment of appropriate fees/ levies/ misuse, penalty and other charge

**12.13.7 Multi level parking**

Multi level parking facility should preferably be developed in the designated parking

spaces or in the residential, public-semi-public facilities, commercial, transport node,

DTC depot, etc. with the following Development Controls:

i. Minimum Plot Size – 1000 sqm.

ii. In order to compensate the cost of Multi-level parking and also to fulfill the growing need of parking spaces within urban area, a maximum of 25 % of gross floor area may be utilized as commercial / office space.

iii. In addition to the permissible parking spaces on max. FAR, 3 times additional space for parking component shall be provided.

iv. Maximum FAR permissible shall be 100 (excluding parking area) or as per the comprehensive scheme. However, no FAR shall be permissible in plots / existing buildings where 5% addl. ground coverage is permissible (Refer para 8 (4) i) Parking Standards, Chapter 17.0 Development Code).

v. Maximum ground coverage shall be 66.6%. The maximum height shall be restricted to permissible height of the land use in which the plot falls. There will be restriction on the number of levels of basement subject to structural safety.

vi. In case of comprehensive schemes, development controls including height shall be as per approved scheme.

vii. Number of basements - No Limit, subject to adequate safety measures.

viii. For development of Multilevel Parking, models should be worked out to encourage the private sector initiative with restricted commercial component, not exceeding 10% limited to FAR 40 on the plot.

ix. Specific proposals requiring relaxation in above-mentioned norms would be referred to the Authority.

A number of multilevel parking sites have been identified by the local bodies / agencies.

(List given in the Annexure I).

Table 12.7: Development Controls for Transportation

| Sl. No | Use Premises | Activities Permitted | Development Controls (4) | | | |
|---|---|---|---|---|---|---|
| | | | Area under Operation (%) | Area under building (%) | FAR* | Floor area that can be utilized for passenger accommodation |
| 1. | Airport | All facilities related to Airport/Aviation Passengers as decided by Airport authority of India including watch & ward | - NA- | | | |
| 2. | Rail Terminal/ Integrated Passenger Terminal Metropolitan Passenger Terminal | All facilities related to Railway, Passengers, operations, goods handling, passengers change over facilities, including watch & ward, Hotel, Night Shelter. | 70 | 30 | 100 | 15% |

| Sl. No | Use Premises | Activities Permitted | Development Controls (4) | | | |
|---|---|---|---|---|---|---|
| 3. | Rail Circulation | All facilities related to Railway Tracks, operational areas including watch & ward. | | -NA- | | |
| 4. | Bus Terminal/Bus Depot | All facilities related to Bus & Passengers, parking including watch & ward, Soft Drink & Snack Stall, Administrative Office, Other Offices, Night Shelterand Hotel. | 50 | 50 | 100 | 25% |
| 5. | ISBT | All facilities related to Bus & Passengers, parking including watch & ward, Bus Terminal, Soft Drink & Snack Stall, Administrative Office, hotel, Night Shelter. | a. Ground Coverage: 25%<br>b. FAR: 100, subject to the following :<br>(i) FAR shall be available on a maximum area of 10 ha. Or area of site whichever is les<br>(ii) ISBT, including operational structures Maximum FAR 70<br>(iii) Hotel/ Passenger accommodation and facilities Maximum FAR 30.<br>c. Parking: In addition to the requirement of parking for ISBT / buses, parking for Hotel/ Passenger accommodation and facilities shall be at the rate of 2 ECS per 100 sq. mt. of floor area.<br>d. The development shall be undertaken in a composite manner. | | | |
| 6. | Toll Plaza | Toll collection booth, utilities, facilities and required infrastructure. | - NA- | | | |
| 7. | Road Circulation | All types of road, street furniture, bus shelters, under ground & over ground services utilities, signals, metro tracks as part of r/w, sub-ways, under-passes, ROB & RUB including watch & ward. | -NA - | | | |
| 8. | Metro Yards | Idle parking of coaches, washing and cleaning facilities, maintenance related facilities, watch & ward and staff related facilities. | 80% | 20% | 100 | 15% |

* The FAR is to be calculated on the Building plot. Area under Bus Shelter not to be included in FAR

Development Controls for Metro Station:

1. Metro Stations along with property development (composite development) up to a maximum area of 3.0 ha. Shall be permitted in all Use Zones, except in Recreational and Regional Park/ Ridge Use Zone, Lutyens' Bungalow Zone and Heritage Zones,

2. This enabling provision of property development would have the following broad development controls:

   i. 25% ground coverage and 100 FAR, including area under Metro Station with no height restrictions and subject to approval of the statutory bodies such as ASI, Airport Authority, and Delhi Urban Art Commission etc.

   ii. In addition to the requirement of parking for Metro Stations, parking for the commercial component will be @ 2 ECS per 100 sq. m.

   iii. The development shall be undertaken in a composite manner and DMRC shall obtain approval of all the concerned local bodies/ agencies.

3. The following structures shall be treated as operational structures:

i. All Metro Stations and tracks supporting at grade, elevated and underground including entry structures, ancillary buildings to house DG sets, chilling plants and electric substation, supply exhaust and tunnel ventilation shafts etc.

ii. Depots and maintenance workshops.

iii. Traction Sub-stations.

iv. Operational Control Centres

v. Police Station.

vi. Recruitment and Training Centers for operational and maintenance staff

vii. Housing for operational staff and Metro security personnel only

viii. Rehabilitation work to be undertaken for the construction of Metro Project

ix. Shops in Metro Stations to cater to the public amenities

x. Structures above platform over the foot print of the Metro Stations]

**Social Infrastructure (MPD 2021 Chapter 13)**

Development controls of the following activities as given in MPD 2021

### 13.1 Health

Size of hospital plot will be restricted up to 1.5 ha. In residential area, with preference to plot having three side open and having minimum 18m ROW on one side. Total floor area of the hospital shall be governed as per the total number of beds allowed in it.

**Table 13.2: Development Controls for Health Facilities**

| Sl No. | Category | Maximum | | | Other Controls |
|---|---|---|---|---|---|
| | | Ground Coverage | FAR | Height | |

<table>
<tr>
<td>1.</td>
<td>Hospital/ Tertiary Health Care Centre</td>
<td>Ground coverage to be decided by interse building to building distances as per Building Bye laws and fire tender movement requirements, subject to a maximum 40% excluding 5% additional ground coverage for multi-level parking</td>
<td>FAR on plot facing ROW should be subject to NOC from all concerned agencies depending on locations shall be as under.
<table>
<tr><td>1.RoW less than 24m</td><td>250</td></tr>
<tr><td>2.RoW24m UP TO 30M</td><td>300</td></tr>
<tr><td>3.RoW 30M and above</td><td>375</td></tr>
</table>
For plots falling under Influence Zones of MRTS/Major Transport Corridors such as Metro and BRT Corridors, 50% more FAR should be available.</td>
<td>No height restriction subject to clearance from AAI, DFS, DMA, NMA to process the proposed revision of NBC as soon as possible. Till the time the NBC is revised, Delhi Fire Service (DFS) may allow no restrictions of height for health care facilities with commensurate fire and life safety measures, subject to clearance from AAI, DFS, DMA, NMA and other statutory provisions</td>
<td>1. Upto 25% if the permitted FAR can be utilized for residential use of essential staff, dormitory/ hostel for attendants of the patients, crèche etc.<br>2. Parking standard @ 2.0 ECS/100 Sqm of floor area.<br>3. Maximum 10% ground coverage shall be allowed for providing atrium* in case, the permissible additional ground coverage for atrium is utilized 25% of the utilized ground coverage shall be counted toward FAR.<br>4. Multi-Level Podium parking shall be permissible to the extent of building envelope lines, free from FAR and ground coverage to facilitate ample parking in spaces, subject to structural safety.<br>5. Common areas such as waiting halls, reception and fire stair cases shall be allowed free from FAR.<br>6. Service floor of height 1.8m shall not be counted in FAR</td>
</tr>
<tr>
<td>2.</td>
<td>Other Health facilities<br>a.<br>i. Maternity Home<br>ii. Nursing Home / Polyclinic/ Dispensary<br>b.<br>i. Family Welfare Centre<br>ii. Paediatric<br>iii. Geriatric Centre<br>iv. Diagnostic Centre</td>
<td>30%</td>
<td>150</td>
<td>26 m</td>
<td>Parking Standard @ 2.0 ECS/100 Sqm of floor area.</td>
</tr>
</table>

| | | | | | |
|---|---|---|---|---|---|
| 3. | a. Veterinary Hospital for pet animals and birds<br>b. Dispensary for pet animals and birds | 30%<br>35% | 150<br>100 | 26 m<br>26 m | Parking standard @ 1.33 ECS/100Sqm of floor area.<br>Parking standard @1.33 ECS/100 Sqm of floor area. |
| 4. | a. Medical College | As per norms of Medical Council of India/Regulatory Body | | | |
| | b. Nursing and Paramedic Institute | 30% | 150 | 26 m | Parking standard @ 2 ECS/100 Sqm of floor area. |
| | C. Veterinary Institute | As per the Veterinary Council of India/ Ministry norms | | | |

Natural sky light condition is exempted for Atrium and construction over the Atrium may be allowed.

# Height restriction of 30 mts. In Hospital Buildings should be reviewed in consultation with Fire Deptt. Of GNCTD.

**Notes:**

1. Plot area for all Hospital/Tertiary Health care Centre would be worked out @ 80 sqm of gross floor area per bed. However, for other health facilities like Maternity/ Nursing homes, family Welfare and other centers, the plot area would be worked out @ 60 sqm of gross floor area per bed.
2. Max. up to 300 sqm of floor area shall be allowed to be used for community space/religious shrine/ crèche/ chemist shop/ bank counter on Hospital sites and also Medical college/ Nursing and Paramedic Institute sites.

**Other Controls:**

a. In case of super specialty medical facilities/hospitals duly certified as such by the competent authority, the gross area shall be worked out @ up to 3[ 80.]sq. mt. Per bed.

b. In case of existing premises/sites, the enhanced FAR shall be permitted, subject to payment of charges as may be prescribed by the Authority / land owning agency and other clearances.

c. Basement after utilization for Parking; Services Requirements such as air conditioning plant and equipment, water storage, boiler, electric sub-station, HT & LT panel rooms, transformer compartment, control room, pump house, generator room; staff locker room, staff changing room, staff dining facilities without kitchen facility, Central sterile supply deptt., back end office; Other Mechanical Services; Installation of Electrical and firefighting equipment's; and other services like kitchen, laundry and radiology lab and other essential services required for the maintenance/functioning of the building may be used for healthcare facilities with prior approval of the concerned agencies.

d. Other controls related to basements etc. are given in the Development code chapter.

e. The bed count of a Health Facility may be allowed as per permissible FAR, needs of the Community and demand studies.

f. Environment clearances shall be made mandatory considering that bio-wastes are generated. Environment clearances are mandatory as per the prevailing regulations related to the environment.

g. Zero discharge for sewerage shall be enforced at the cost of the promoters and post treatment water can be used by premises for its needs of horticulture, flushing, coolant tower, washing or disposal to other construction sites. These issues concerned the local bodies and can be dealt accordingly as per existing regulations as the time of sanctioning the plan.

h. The additional power requirements shall be met by power supply from grid and till such time by means of suitable captive generation.

**13.2 Education:**

Table 13.4Development Controls for Education Facilities

| S.No | Category | Maximum | | | Other Controls |
|---|---|---|---|---|---|
| | | Gr.Cov. | FAR | Height | |
| 1. | Play School, Coaching Centre, Computer Training Institute, physical Education Centre etc. | N.A. | N.A. | N.A. | 1. Practice of providing dedicated Nursery School plots in the layout plan discontinued as same is permissible in Mixed use. Parking standard @ 1.33 ECS /100 sq. mt. of floor area. |
| 2. | Nursery School | 33.33 % | 100 | 15 mt. | |
| 3. | Primary School | 30% | 120 | 18 mt. | 2. In case of schools for mentally / * 3[differently abled persons], 20% of the maximum Far can be utilized for residential use of essential staff and student accommodation. |
| 4. | Senior Secondary School/ 4[*Secondary School. | 35% | 150 | 18 mt. | |
| 5. | School for Mentally Challenged. | 50% | 120 | 18 mt. | **Parking Standard:** |
| 6. | School for 5[differently abled persons. | 50 % | 120 | 18 mt | Primary School / Middle School @ 1.33ECS/100 sq. mt. of floor area. Sr. Secondary School @ 2.00 ECS/100 sq. mt. of floor area. The areas earmarked for parking if misused, liable to be municipalized /taken over. |
| | | | | | 3. Other controls related to basements etc. are given at end of this chapter. |

**Notes:**

Pre-Primary Schools/Nursery Schools/Montessary Schools/Creche, Play Schools, are permissible in residential use premises as per Mixed use policy.

**Other Controls:**

1. In case of new schools, the front boundary wall shall be recessed by 6 mt. to accommodate visitors parking within setback area.

2. Upto 10% variation in plot size is permitted. Differential norms will be applicable to Special Area, Regularized Unauthorized Colonies, Urban Villages and Resettlement Colonies.

3. Playground shall be developed on pool basis in different areas at neighborhood level.

Table 13.6Development Controls for Education Facilities (Higher Education)

| Sl.No | Category | Maximum<br>Gr. Cov. FAR Height | Other Controls |
|---|---|---|---|
| 1.<br><br><br><br>2.<br><br>3. | Vocational Training Centre (ITI/ Polytechnic /Vocational / Training Institute/Management Institute / Teacher Training Institute etc.) Research and Development Centre.<br><br>General College<br><br>Professional College (Technical) | 35% 225 37mt. | 1. Up to 30% of Max the permissible FAR can be used for hostel accommodation for the students.]<br>2. Parking standard @ 1.33 ECS / 100 sq. mt. of floor area. The areas earmarked for parking if misused liable to be municipalized/ taken over by the authority.<br>3. Other controls related to basements etc. are given in the chapter 17, Development Code of MPD- 2021. |
| 4.<br><br><br><br>5. | University Campus including International Education Centre (IEC) – Large campus (10 ha. And above) will be divided into following four parts: | | 1. Parking standard @ 1.33 ECS/100sq.m of floor area.<br>2. Other controls related to basements etc. are given in the chapter 17, Development Code of MPD- 2021.<br>3. Landscape plan to be prepared. |
| | a) Academic including Administration ( 45% of total land area) | 30% 225 37 mt. | |
| | b) Residential (25% of total land area | 1. Regulations for group housing shall apply.<br>2. The land shall be reserved for facilities as per residential norms. | |
| | c) Sports and Cultural activities 15% | | |
| | d) Parks and Landscape (15%) | 10% 15 26 mt. | |
| | | - NA - | |
| 5. | College<br>i. In case of old colleges plot will be divided as follows:<br>Area per college 4.0Ha<br>a) College building area: 1.8 ha 45% area<br>b) Play field area: 1.8 ha. 45% area<br>c) Residential including Hostel area: 0.4ha 10% areas.<br>ii. In case of variation in area the % to be followed. | 1. Development control norms for academic college building area & residential will be as S.No.4 above | |

### 13.3 Sports

Para 13.3.3 (MPD 2021) Development controls for the various sports facilities will be indicated below:

| | |
|---|---|
| Maximum Ground Coverage | 20% including amenity structures |
| Maximum FAR | 40 |
| Height | NR ( Subject to clearance from AAI, Fire Department and other statutory bodies) |
| Parking | 2 ECS/100 sq. mt of floor area. |

**Other Development Controls:**

i. To incentives development of sports facilities and swimming pool (up to maximum 100 sq. mt.) Within the group housing areas, schools, clubs, etc. shall not be counted towards ground coverage and FAR.

ii. All these various sports facilities shall have layout plan, landscape plan, and parking plan, etc.

### 13.4 Communication – Post / Telegraph / Telephone Facility

Table 13.9Development Controls for Communication Facilities

| Sl.No | Category | Maximum | | | Other Controls |
|---|---|---|---|---|---|
| | | Gr. Cov. | FAR | Height | |
| A | POST & TELEGRAPH | | | | |
| 1. | a. Post Office Counter (without delivery)<br>b. Courier Service Office | No specific site reservation to be kept in the layout plan since permitted in all use zones/ under mixed use as per requirement, except in recreational use zone. | | | |
| 2. | Telegraph Office (Booking & Delivery) | | | | |
| 3. | Head Post Office with Administrative Office & with/ without delivery office. | 30% | 120 | 26 mt. | 1. Up to 15% of maximum FAR can be utilized for residential use of essential staff.<br>2. Parking standard @ 1.33 ECS / 100 sq. mt. of floor area.<br>3. Other Controls related to basements etc. are given in,Development Code, MPD - 2021 |
| B | TELEPHONE | | | | |
| 4. | a. Telephone Exchange<br>b. RSU (Remote Subscriber Units) | 30%<br>30% | 120<br>100 | 26 mt.<br>15 mt. | |

### 13.5 Security – Police

Table 13.11Development Controls for Security (Police) Facilities.

| Sl.No | Category | Maximum | | | Other Controls |
|---|---|---|---|---|---|
| | | Gr. Cov. | FAR | Height | |
| 1. | Police Post | 35% | 150 | 15 mt. | 1. Up to 30% of maximum FAR can be utilized for residential use of essential staff (except Police Station which will as per of Notes below the table)<br>2. Parking standard @ 2.00 ECS/ 100 sq. mt. of floor area.<br>3. Additional space available in police station due to increased development controls shall be used for locating Civil Defense and Home Guards etc.<br>4. Up to 15% of maximum FAR can be utilized for residential use/hostel for essential staff and student accommodation, in Police Training Institute/ College.<br>5. Other controls related to basements etc. are given in Chapter 17,Development Code , MPD – 2021 |
| 2. | Police Station | 30% | 200 | 26 mt. | |
| 3. | District Office & Battalion | 30% | 120 | 26 mt. | |
| 4. | Police Lines<br>i). Administration<br>ii.) Residential<br>iii). Sports & Facilities<br>iv). Open Spaces | Land Distribution:<br>- 20%<br>- 30%<br>- 10%<br>- 40% | | | |
| 5. | District Jail | 30% | 120 | 26 mt. | |
| 6. | Police Training Institute/College* | 30% | 120 | 26 mt. | |
| 7. | Police Firing Range | 12.5% | 25% | 9 mt. | |
| 8. | Police camp including Central Police Organization/Security Forces* | 12.5% | 255 | 9 mt. | |
| 9. | Traffic and Police Control Room | 1. As per requirement on major road junctions/ stretches etc. as part of road right of way based on site feasibility.<br>2. Maximum are – 25 Sq. mt. | | | |

Notes:

** 60% of the Plot land shall be utilized for the Police Station with 200 FAR and 40% of the plot land shall be utilized for Police Personnel Housing with 400 FAR. Whereas other Development Control Norms i.e., ground coverage, set-back and parking requirement, etc. shall be as prescribed in Table 13.11 and para 4.4.3B Residential Plot-Group Housing, respectively. Existing police station sites shall also be eligible for afore-said provision.

### 13.6 Safety

Table 13.13Development Controls for Safety / Fire Facilities

| Sl.No | **Category** | **Maximum** | | | **Other Controls** |
|---|---|---|---|---|---|
| | | Gr. Cov. | FAR | Height | |
| 1. | Fire Post | 30% | 120 | 26 mt. | 1. Up to 25% of maximum FAR can be utilized for residential use of essential staff in fire station.<br>2. Parking standard @ 1.33 ECS/100 sq. mt. of floor area.<br>3. Up to 15% of maximum FAR can be utilized for residential use/hostel for essential staff and student accommodation, in Fire Training Institute/College.<br>4. Other controls related to basements etc. are given in Development Code , MPD - 2021 |
| 2. | Fire Station | 30% | 120 | 26 mt. | |
| 3. | Disaster Management Centre | 30% (on building area only) | 120 | 26 mt. | |
| 4. | Fire Training Institute/College | 30% | 120 | 26 mt. | |

### 13.7 Distributive facilities

Table 13.15Development Control for Distributive Services

| SI.No | Category | Maximum<br>Ground Coverage FAR Height | Other Controls |
|---|---|---|---|
| 1. | Milk booth/Milk and fruit & vegetable booth | Permitted in all zones as per approved layout plan. | |
| 2. | LPG godown including booking office. | i. Plot size- up to 600sqm including booking office and security hut.<br>ii. Permitted in all use zones except in residential and recreational use zones subject to statutory clearances. | |
| 3. | SKO/ LDO outlets | i. Permitted in all use zones except in residential and recreational use zones subject to statutory clearances. | |

### 13.8 Socio – cultural facilities

Table 13.17Development Controls for Socio- Cultural Facilities

| Sl.No | Category | Maximum<br>Gr. | FAR | Height | Cov. | Other Controls |
|---|---|---|---|---|---|---|
| 1. | a. Multipurpose Community Hall.<br>b. Banquet hall | 30%<br>30% | 120<br>120 | 26m<br>26m | | 1. Parkingstandard @3.0ECS/100sq m of floor area.<br>2. Other controls related to basements etc. are given at end of this chapter |
| 2. | a. Community Recreational Club.<br>b. Recreational Club | 1[30% | 120] | 26m | | 3. Parkingstandard @2ECS/100sq.m of floor area. |
| 3. | Socio- cultural activities such as auditorium, music, dance & drama centre/mediation & spiritual centre etc. | 35% | 120 | 26m | | 4. 1. Parkingstandard @2ECS/100sq.m of floor area.<br>5. 2. A proper scheme for visitors parking and parking adequacy statement shall be prepared taking into consideration large number of visitors. |
| 4. | Exhibition cum Fair Ground | 20% | 20 | - | | 6. Subject to statutory clearances. |
| 5. | Science centre | 30% | 120 | 26m | | 7. Parking standard@2ECS. |
| 6. | International Convention Centre | 30% | 120 | NR. Subject to approval of AAI, Fire Department and other statutory bodies | | 8. Parking standard@2ECS. |

**Notes:**

i. The Recreational Clubs located in LBZ Area, Civil Lines Bungalow Area, Recreational Use Zones and existing on Heritage Structures will be dealt on case to case basis and Technical Committee of DDA will approve the Development Controls norms based on the existing status.

ii. In the open area apart from outdoor games/sport facilities, swimming pool would be permissible up to an area of 300sqm. Free from ground coverage

iii. In case of banquet hall,

a) Basement within the ground envelope shall be allowed for parking, stilt floor for parking is permissible.

b) 30% of basement area for services, storage shall not be counted in FAR.

iv. In case of International Convention Centre, maximum 10% ground coverage shall be allowed for providing atrium. In case, the permissible additional ground coverage for atrium is utilized, 25% of the utilized ground coverage shall be counted towards FAR.

**13.9 Other community facilities:**

Development Controls forold age homes, religious facilities, etc. are given in table below

*Table 13.19 Development Controls for other community facilities

| Sl.No | Category | Maximum | | | Other Controls |
|---|---|---|---|---|---|
| | | Ground Coverage | FAR | Height | |
| 1 | Old Age Home/Care Centre for Differently Abled Persons] / Mentally Challenged/Working Women/Men Hostel/ Adult Education Centre/Orphanage/ Children's Centre/Night Shelter. | 30% | 120 | 26m. | 1. Parking standard@ 1.8 ECS/100 sqm of floor area.<br>2. Other controls related to basement etc. are as given in Chapter 17,Development Code , MPD - 2021 |
| 2. | Religious<br>a) At neighbourhood level<br>b) At sub city level in urban extension* | 35%<br><br>25% | 70<br><br>50 | 15m. including shikhara<br>26m. | |
| 3. | Anganwari<br>a) At Housing area/Cluster level | 30% | 60 | 15m. | |

| | | | | | |
|---|---|---|---|---|---|
| 4. | Service Apartment | 30% | 225 | NR* (Subject to approval of AAI, Fire Department and Other Statutory Bodies) | Parking @ 2ECS per 100 Sqm. of floor area. Other controls related to basements etc. are given in the Development Code Chapter. |

These facilities should be developed in a composite manner to accommodate a number of religious institutes/premises with common facilities.

**Note:-** sites of dhobi Ghats/laundry shall be provided in residential use zone/PSP facilities areas as per the norms of local body.

**13.11 Public & Semi –Public Facilities/Premises (Para No. 13.11 of MPD 2021)**

The following norms shall be applicable in case of PSP facilities/premises for which specific development controls have not been specified.

1. Max. Ground Coverage 30%
2. Max. Floor Area Ratio 120
3. Max. Height 26m

Other controls:-

Parking @2ECS/100sqm. Of floor area other controls as given in Development Code Chapter.

Note:

i. In case of plots allotted to political parties by the government land housing agencies, up to 15% of maximum FAR may be utilized for residential hostel accommodation.

ii. Amalgamation of the smaller PSP plots or sub division of the larger PSP plots for a single or its multiple use, is allowed with permissible PSP facilities as per the provisions of MPD-2021.

**Development Code (MPD-2021 Chapter -17)**

Development Control

Clause 2.0 Definitions

2(4) Layout Plan means a Plan indicating configuration and sizes of all Use Premises. Each Use Zone may have one or more than one Layout Plan depending upon the extensiveness of the area under the specific Use Zones and vice versa. A layout plan shall have at least two use premises (apart from Recreational, utilities and transportation) and a minimum area of 1 Ha. Below which it shall be termed as site plan or sub division plan.

2(5) Site Plan: A detailed Plan showing the proposed placement of structures, parking areas, open space, landscaping, and other development features, on a parcel of land, as required by specific sections of the development code.

Clause 3.0 Establishment of Use zones and Use premises

3(4) The layout plans already approved by the Authority or any other local Authority concerned in accordance with law shall be deemed to have been approved under this code.

3(5) An area in respect of which there is no approved Layout Plan shall be governed by the provisions of the Master Plan / Zonal Development Plan.

3(6) In case of urban design schemes, redevelopment along MRTS Corridor, Urban renewal schemes etc. on comprehensive basis the minimum area prescribed for planning and approval:

a. Scheme area for redevelopment – 4 Ha.

b. Plot area for redevelopment – 3000 sqm.

3(7) Accommodation Reservation (AR) and Transfer of Development Control Rights (TDR) are used as development control tools for implementing plans for redevelopment schemes in urban areas.

3(8) A landscape Plan shall be prepared in case of the premises of size 3000sqm. and above.

3(9) The natural drainage pattern shall not be disturbed.

3(10) Rainwater harvesting shall form an integral part of the storm water drainage plan, at the time of sanction of any Layout Plan.

Sanction of Plans:-

3(11) Layout Plana/site plan and building plans shall be approved by the local bodies and Authority in their areas of jurisdiction.

3(12) Authority/Local Body(s) shall be empowered after levying penalty to compound deviations from limits of coverage/ FAR to the extent of 5% of the permissible coverage and FAR, a subject to maximum of 13.5 sqm. in building(s)/premises at the time of considering the completion/occupancy certificate. In group Housing schemes and Public & semi public facilities, 5% FAR beyond permissible FAR can be compounded by the authority /Local Body at the time of considering the completion/ occupancy certificate.

3(13) Wherever required, the Technical Committee of the DDA shall formulate policy guidelines for the sanctioning of local area plans, layout plans, comprehensive schemes, re-development schemes, urban renewal schemes and multistoried buildings in all land use categories. The Technical Committee shall be empowered to call for the plans from the development organizations/Local Bodies and would give directions/ recommendations wherever necessary.

**New Temporary cinemas** shall not be permissible, however already existing Temporary Cinemas shall be allowed to continue on permanent basis as per the conditions given below:

i. Seat Capacity : Minimum 300 seats in one or more cinema halls

ii. Minimum road R/W in front - 18 m.

iii. Parking Requirement - 3 ECS per 100 sq.m of Built up space (with in Plot Area)

iv. Maximum Ground Coverage - 50% (subject to minimum setbacks as per MPD – 2021 to be adhered)

v. FAR - 100 subject to a maximum built up area of 3000 sq.m. In case, the plot size is more than 4000 sq.m and is located on 24 mt. ROW, maximum FAR allowed not to exceed 4000 sq.m subject to undertaking traffic impact study, availability of the road width and the surrounding development so that it may not cause traffic congestion in the area.

vi. Plot size: Min. 1200 sq.m & max. 4000 sq.m. In case a Cinema hall has more land, the rest of the area would be kept Green.

vii. Max Permissible height : 15 m

viii. Commercial activity shall be permissible after excluding the space required for capacity of 300 seated cinema hall. The commercial space will be for the activities as permissible for Local Shopping Centre (LSC) in MPD – 2021.

ix. Cinema would confirm to the Cinematography Act and other statutory provisions. Multiplexes shall accordingly be permissible.

x. Landuse conversion charges, FAR charges, betterment levies and other charges will be levied as approved by the Government from time to time.

xi. The local body and licensing Authorities shall ensure that the above conditions are compiled before renewing the license.

xii. The temporary cinema existing on government land shall not continue.

xiii. The excess land in such cases if required for larger public purposes shall be acquired and developed as per the local area needs/Master Plan provisions by the concerned local agencies.

Individual cases will be processed as per the above provisions after the enabling provisions are made in the MPD- 2021 for change of landuse.

It should be ensured that adequate parking facilities are provided within the respective plot areas.

**Clause 8.0 sub division of use zones, permission of use premises in use zones and control of buildings.**

**General notes**

1. Where development controls are not stipulated for any premise, the same can be formulated by the Authority.

2. The mezzanine floor and service floor wherever provided shall be considered as a part of the total FAR. In case of the buildings with 26m. and more height in all use-zones, Technical Committee of DDA may permit the following in special circumstances:

   a) In case of provision of stack-parking in stilt floor or basement, minimum height should be 2.5m.

   b) Intermittent service floor may be permitted for installation of equipments and services required for the maintenance of the building with prior approval of the agencies concerned and are not to be counted in FAR. The height of the service floor is to be decided based on the depth of structural members, the height requirement for providing water-reservoirs, other equipment's, etc. The height of Service floor in the building shall be limited to 1.8m.]

3. If the building is constructed with stilt area of non-habitable height (2.4mts) and is proposed to be used for parking, landscaping, etc. the stilt floor need not be included in FAR.

4. Wherever the building regulations are given for different categories of plots, the area covered and the floor area shall in no case be less than the permissible covered area and floor area respectively for the largest size of plot in the lower category.

5. In case of all the plots of size 1000 sq.m. and above, except 'Residential Plot – Plotted Housing', atrium will be permitted with stipulations – Maximum 10% additional ground coverage shall be allowed for providing atrium. In case, the permissible additional ground coverage for atrium is utilized, 25% of the utilized ground coverage shall be counted towards FAR.

Table 17.1: Minimum Setbacks (other than Residential Plotted Development)

| Sl.No | **Plot Size( in sq. mt)** | **Minimum setbacks** | | | |
|---|---|---|---|---|---|
| | | **Front** (mt.) | **Rear** (mt.) | **Side** (mt.) **1** | **Side**(mt.) **2** |
| 1. | Up to 60 | 0 | 0 | 0 | 0 |
| 2. | Above 60 & up to 150 | 3 | 1.5(avg.) | - | - |
| 3. | Above 150 & up to 300 | 4 | 2(avg.) | - | - |
| 4. | Above 300 & up to 500 | 4 | 3 | 3 | - |
| 5. | Above 500 up to 2,000 | 6 | 3 | 3 | 3 |
| 6. | Above 2,000 up to 10,000 | 9 | 6 | 6 | 6 |
| 7. | Above 10,000 | 15 | 12 | 12 | 12 |

i. In case the permissible coverage is not achieved with the above given setbacks, the setbacks of the preceding category may be followed.

ii. The setbacks are subjected to requirements of height and ventilation as per building byelaws.

iii. In case a layout is sanctioned with more than the minimum prescribed setbacks, the same shall be followed in the sanction of the building plans.

iv. The technical committee of DDA may relax setbacks, ground coverage and height in special circumstances.

v. ESS wherever required to be provided within the plot, is allowed by shifting of side/rear setbacks.

8(4) **Parking Standards:**

Parking standards have been prescribed in each use premises however, where it is not prescribed, it will be followed as given in the table 17.2

Table 17.2Parking Standards

| **S.No** | **Use Premises** | **Peio Permissible Equivalent Car Spaces (ECS) per 100 sqm. Of floor area** |
|---|---|---|
| 1 | Residential | 2.0 |
| 2 | Commercial | 3.0 |
| 3 | Manufacturing | 2.0 |
| 4 | Government | 1.8 |
| 5 | Public and Semi – Public Facilities | 2.0 |

i. In existing buildings having plot area of more than 2000sqm; an extra ground coverage of 5% shall be permissible for construction of automated multi-level parking to provide dedicated parking structures for additional needs.

ii. For the provision of car parking spaces, the spaces standards shall be as given in table below.

Table 17.3 **SpaceStandards for Car Parking:**

| Sl. No. | **Type of Parking** | **Area in Sq. mt. per ECS** |
|---|---|---|
| 1. | Open | 23 |
| 2. | Ground floor covered | 28 |
| 3. | Basement | 32 |
| 4. | Multi level with ramps | 30 |
| 5. | Automated multilevel with lifts | 16 |
| | | |

iii. In the use premises, parking on the above standards shall be provided within the plot.

iv. In cases, where the building (except hotel) with sanctioned plan is existing/under construction and where building plans stand sanctioned as per MPD-2001, the parking is to be provided for additional FAR availed, shall be as per the parking standards prescribed in MPD-2021.

**8(5) Basements:**

a. Basement(s) up to setback line maximum equivalent to parking and services requirement, such as Air Conditioning Plant and equipment, water storage, Boiler, Electric Sub-station HT and LT Panel rooms, Transformer Compartment, Control Room, Pump House, Generator Room and other mechanical services and installation of electrical and firefighting equipment's, and other services required for the maintenance of the building with prior approval of the concerned agencies, could be permitted and not to be counted in FAR. However, the area provided for services should not exceed 30% of the basement area. In case of Hotels Laundry, Cold Room for storing Food articles, Linen store, Garbage room, Housekeeping store and cold storage may be allowed.

b. The basement(s) beyond building line shall be kept flushed with the ground and shall be ventilated with mechanical means of ventilation; and

c. Basement(s) shall be designed to take full load of the fire tender, wherever required and subject to adequate safety measures.

d. In case the basement is used for activity in conformity with the use premises, wherever permitted, the same shall be counted in FAR subject to clearance from the Fire Authorities and other statutory bodies.

e. Parking area, if misused, is liable to be municipalized / taken over by the Local Body/Authority.

f. The ESS, firefighting installations and underground water tank shall neither be counted in ground coverage nor in FAR.

**8(6) Services Plan:**

The Development Agency should provide for the following in layout plans of plots of size 3000 sqm. and above:

i. Recycling of treated waste water with separate lines for portable water and recycled water. Dual piping system to be introduced.

ii. Ground water recharge through rain water harvesting, conserving water bodies and regulating groundwater abstraction.

iii. Treated sewage effluent should be recycled for non-potable uses like gardening, washing of vehicles, cooling towers, etc.

iv. Utilities such as, underground water storage tank, roof-up water harvesting system, separate dry and wet dustbins etc. are to be provided within the plot.

v. All hospitals, commercial, industrial, hotels, restaurants, auto workshops, etc. will have to make arrangements for primary effluent treatment within the plot.

vi. Provide ESS and generator and to submit energy consumption/audit will be submitted at the time of sanction of building plans.

vii. Provision of cavity walls, atriums, shading devices in building will be encouraged to make them energy efficient.

viii. Solar heating system will be provided on all plots with roof area of 300 sqm. and above.

ix. In order to encourage the above, 1% to 4% extra ground coverage and FAR, on each, may be given as an incentive by the local bodies, depending upon the provisions made. In exceptional cases 5% incentive may be permitted.

x. These incentives shall be based on the rating criteria prescribed by 'Green Rating for Integrated Habitat Assessment' (GRIHA) for green buildings.

xi. In case of non-compliance of above, after obtaining occupancy certificate, penalty at market rate shall be levied for incentive FAR by land owning agency.

The regulation for enforcement of above shall be prepared by the Director, Local Self Government, GNCTD in consultation with Environment Department, GNCTD within a period of six months (after notification of modifications) and notified with the approval of the Authority/Central Government.

**8. (6).1 Neighborhood Level**

i. The listed water bodies and/or any water body above 1 ha. size are mandatory to be systematically included in the landscape plan.

ii. Decentralized STP's with smaller capacities are to be provided at the community level. Possibility of generating energy/gas as fuel from sewage shall be explored.

iii. Municipal Waste of biodegradable and recyclable waste is to be segregated at source, decentralized treatment at neighborhood level may be adopted; whereas for non-biodegradable waste centralized treatment may be followed.]

**8 (7) HIGH RISE BUILDINGS**

a. Buildings taller than 15M (without stilt) and 17.5M (including stilt) in all use zones will be considered as a High Rise Building.

b. In case of provision of stack-parking in stilt floor, minimum height of 2.4 m. for stilt floor may be relaxed. However, in case of stack parking the height shall be as per design and structural safety requirement.

c. Intermittent service floor may be permitted for installation of equipments and services required for the maintenance of the building with prior approval of the agencies concerned and is not to be counted in FAR. The height of the service floor is to be decided based on the depth of structural members, the height requirement for providing water-reservoirs, other equipments, etc. Height below bottom of any beam shall not be more than 1.8 m. from the finished floor level excluding false floor if any.

d. Basement will be permitted within the setback lines subject to clearance from local bodies / departments concerned, Municipal Corporation and Fire Department. Where there are no setbacks, basements should be permitted up to 2 meters and where there is setback, it should be 6 meters from the plot boundary.

e. Podium(s) will be permitted within the setback lines subject to clearance from the fire department. The movement of vehicles and parking shall be restricted within the podium. Rooftop to be allowed for uses such as swimming pool, landscaping, and related structures.

f. Other conditions for basement will be as Sub-Clause 8(5).

**DCR for Civil line/Bungalow area:** For civil line/bungalow area the Draft Zonal Development Plan for Zone –

"C" (Civil lines Zone) approved by Authority ON 30.10.2007 Vide item No.82/2007, Area Planning – II, Delhi Development Authority.

Reference: -http://dda.org.in/planning/docs/Zone-C,Report040108.pdf

*Development Control norms applicable for land assembly & land pooling (chapter- 19, Para19.6)

i. Development Control Norms under the policy are:-

a. Residential FAR 400 FOR Group Housing to be applicable on net residential land which is exclusive of the 15% FAR reserved for EWS housing.net residential land to be a maximum of 55% of gross residential land.

b. FAR for city level commercial and city level PSP to be 250.

c. Maximum ground coverage shall be 40%.

d. Density of FAR 15% for EWS population shall be considered over and above the permissible gross residential density of 800-1000pph.

e. Adequate parking as per norms of 2 ECS/100sqm of built up to be provided for residential development by the DE, however, in case of the housing for EWS, the norms of 0.5ECS/100sqm of BUA to be provide.

f. Incentives for green building norms as per MPD 2021 to be applicable to group housing developed under this policy.

g. Basement below and beyond building line up to setback line may be kept flushed with the ground in case mechanical ventilation is available. In case not prescribed, basement up to 2mts from plot line shall be permitted.

ii. Sub-division of gross residential areas and provision of facilities (local and city level) shall be as per MPD-2021.

iii. Local level facilities to commensurate with the density specified at a 19.6(i) (d) above.

iv. Tradable FAR is allowed for development, however, in case of residential use, tradable FAR can only be transferred to another DE in the same planning Zones having approval/license of projects more than 20 Ha.

# ANNEXURE –VII

**Protection against Hazards** (Please refer clause 9.2.2 of this document)

**1. Protection of areas from earthquakes**

a. In those areas where there are no dangers of soil liquefaction or settlements or landslides, all building structures and infrastructures should be designed using the relevant Indian Standards as provided in the Building Regulations and the National Building Code

b. Soils subjected to liquefaction potential under earthquake shaking can be improved by compaction to desired relative densities, so as to prevent the possibility of liquefaction.

c. Buildings and structures could be founded on deep bearing piles going to non-liquefiable dense layers.

d. Steep slopes can be made more stable by terracing and construction of retaining walls and breast walls, and by ensuring good drainage of water so that the saturation of the hill-slope is avoided.

e. Any other appropriate engineering intervention to save the building structures or infrastructure from the fury of the earthquake.

**1.1 For structural design the Seismic Microzonation Thematic Maps prepared by India Metrological Department shall be referred. Details of Maps are as under:**

**MAP-1**: Average Sheer velocity at 30 m depth(m/s), **MAP-2**: Peak Frequency Map based on H/V ratio, **MAP-3**: Peak Ground acceleration (PGA) at surface for MCE, **MAP-4**: Peak Ground Acceleration (PGA) at surface for DBE, **MAP-5**: Spectral Acceleration at 0.1 Second for DBE, **MAP-6**: Spectral Acceleration at 0.3 second DBE, **MAP-7**: Spectral Acceleration at 0.5 second DBE, **MAP-8**: Spectral Acceleration at 1.0 second DBE, **MAP-9**: Spectral Acceleration at 0.1 second for MCE, **MAP-10**: Spectral Acceleration at 0.3 second for MCE, **MAP-11**: Spectral Acceleration at 0.5 second for MCE, **MAP-12**: Spectral Acceleration at 1.0 second for MCE, **MAP-13**: Liquefaction at 0.9 mbgl, **MAP-14**: Hazard index

**2. Protection from cyclonic wind damage**

Buildings, structures and infrastructures in the cyclone prone areas should be designed according to the Indian Standards and Guidelines as provided in the Regulations and the National Building Code.

**Note:** Similar protection methods could be used against flooding caused in cyclone prone areas by high intensity rains or by the storm surge.

The concept of land zoning should be kept in mind for areas where protection works are taken up to decide inter-se priority for location of structures considering possibility of failure of protection works during extreme disaster events.

# ANNEXURE -VIII

Number and Type of Lifts Required for Different Occupancies and Space for Electrical Installations (Please refer clause 9.4.2 of this document)

1. The number and type of lifts required depending on the capacity of lift, desired speed nature of operation are as given in table below.

Table: Number and types of lifts for non-residential Multistoried Building

| S. No | No. of floors | Capacity of lifts in person | No. of persons that can be carried by a lift | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Speed m/s | In 6 min | | In 30 mins | | In 50 mins | | In 60 mins | |
| | | | | Manually operated | Auto matic | Manually operated | Auto matic | Manually operated | Automatic | Manually operated | Automatic |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
| 1 | 7 | 6 | 0.6-0.75 | 17 | - | 102 | - | 170 | - | 204 | - |
| 2 | 7 | 8 | 0.6-0.75 | 22 | - | 132 | - | 220 | - | - | - |
| 3 | 7 | 10 | 0.6-0.75 | 26 | - | 156 | - | 260 | - | 312 | - |
| 4 | 7 | 10 | 1.0 | 30 | - | 180 | - | 300 | - | 360 | - |
| 5 | 7 | 13 | 1.0 | 37 | - | 122 | - | 370 | - | 444 | - |
| 6 | 11 | 6 | 0.6-0.75 | 11 | - | 70 | - | 115 | - | 140 | - |
| 7 | 11 | 8 | 0.6-0.75 | 15 | - | 90 | - | 150 | - | 180 | - |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 11 | 10 | 0.6-0.75 | 18 | - | 108 | - | 180 | - | 216 | - |
| 9 | 11 | 13 | 0.6-0.75 | 22 | - | 132 | - | 220 | - | 264 | - |
| 10 | 11 | 10 | 1.0 | 21 | - | 126 | - | 210 | - | 252 | - |
| 11 | 11 | 10 | 1.5 | 24 | - | 144 | - | 240 | - | 288 | - |
| 12 | 11 | 13 | 1.5 | 28 | - | 156 | - | 260 | - | 312 | - |
| 13 | 11 | 13 | 1.5 | 32 | - | 180 | - | 300 | - | - | - |
| 14 | 16 | 10 | 1.0 | 17 | - | 100 | 126 | 170 | 210 | - | 252 |
| 15 | 16 | 13 | 1.5 | 20 | 24 | 120 | 145 | 200 | 240 | 248 | 290 |
| 16 | 16 | 13 | 1.5 | 23 | 30 | 138 | 180 | 230 | 300 | - | 360 |
| 17 | 16 | 16 | 1.5 | 25 | 33 | 150 | 198 | 250 | 330 | 300 | 356 |
| 18 | 21 | 10 | 1.5 | 18 | 32 | 108 | 132 | 180 | 220 | 214 | 264 |
| 19 | 21 | 13 | 1.5 | 21 | 26 | 126 | 156 | 210 | 250 | 250 | 312 |
| 20 | 21 | 14 | 1.5 | 23 | 28 | 138 | 168 | 230 | 280 | - | - |

**Note-1:**

a) For all non-residential buildings, the traffic cleared in 50 minutes is considered adequate and is approved by Authority/ concerned local body. As such for calculation the number of lifts required, the rate of the clearance of traffic in column 9 and 10 and the population shallbe taken into consideration.

b) In addition to total number of lifts required as above, provision of one lift of the same capacity shallbe considered to serve as stand-by.

**Note-2:** The population shall be worked out on the basis of useful carpet area which the person occupies (excluding area of Verandah, Lobbies, Halls, Passages, Lavatory blocks, etc.)

**Note-3:** The population on ground and first floor may not be taken into consideration since these floors are not generally served by lifts.

**Note-4:**

0.75 meter per sec. Equivalent to 150 ft. per Min.

1.00 meter per sec. Equivalent to 200 ft. per Min.

1.5 meter per sec. Equivalent to 300 ft. per Min.

**Note-5:** The height of buildings for lift installation i.e. the travel on the lift presumed in the above statements is as below:

7 floors- 21.0 m

11 floors- 33.0 m

16 floors- 48.0 m

21 floors- 64.0 m

Table: Number and types of lifts for Residential Building

| S.no | No. of floors | No | Passenger unit capacity Persons | Speed in m/s | Landing Gate Type | Central System | Service Lift No. | Capacity Persons | Type of Gate | Central System |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5 to 8 | 2 | 6 | 0.0 to 0.5 | - | Automatic push button operation both from car and landing | - | - | - | - |
| 2 | 9 to 11 | 2 | 8 | 1.6 to 1 | - | -do- | 1 | 8 | - | Push button car handle switch control |
| 3 | 11 to 13 | 2<br>1 | 8<br>6 | 1.6 to 0.74 | -<br>Power operated doors | do- and without collection system<br>-do- | 1 | 8 | - | -do- |
| 4 | 13 to 19 | 2<br>2 | 8<br>8 | 1<br>1 | -<br>Power operated doors | -do- | 1 | 8 | - | -do- |

* For buildings more than 15 m in height collapsible gates shall not be permitted.

The dimensions and relevant information for lift installations like lift well, pit depth, machine room, clearance from top floor landing to machine room flooring is given in table below:

Dimensions and required information for Lift Installation in Building.

| Carrying capacity of lift (person) number | Load(kg) | Lift speed | Dimension of lift well front depth(in cm.) | (Cm) | Leading pit entrance (cm) | Dimension of machine room | Clearance from top floor landing to machine room flooring cm | Imposed load in tones on top of lift well due to installation. it may be noted that figures do not include weight of the machine from floor and well etc. |
|---|---|---|---|---|---|---|---|---|

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 272 | Up to & including 1 m/s | 175 | 115 | 70 | 140 | 230 | 275 | 245 | 450 | 6.5 |
| 6 | 408 | Do | 195 | 135 | 80 | 140 | 230 | 335 | 275 | 450 | 7.0 |
| 8 | 544 | Up to & including 1 m/s | 200 | 170 | 80 | 150 | 245 | 395 | 275 | 450 | 8.5 |
| 10 | 680 | Up to & including 1.5 m/s | 225 | 170 | 90 | 150 | 245 | 395 | 305 | 475 | 10.5 |
| 13 | 884 | --do-- | 235 | 188 | 90 | 150 | 245 | 425 | 335 | 470 | 13.0 |
| 16 | 1088 | --do-- | 235 | 205 | 105 | 150 | 245 | 520 | 335 | 480 | 15.0 |
| 20 | 1360 | --do-- | 235 | 255 | 105 | 150 | 245 | 520 | 335 | 480 | 15.0 |

**Notes:**

i) All lift well dimensions are minimum clear finished plumb requirements.

ii) Where more than one lift is located in the lift well, extra width of 10 cm. Separator beam should be provided.

iii) 1 m/s = 200 ft./min.

iv) The height of landing entrance should be 210 cm. (about 7 ft.) for all lifts.

# ANNEXURE -IX

1 Space for Electrical Installations (Please refer clause 9.4.3 of this document)

The spaces required for different electrical installations are given from 1.1 to 1.3

1.1 Electric Sub-station – The norms given in 1.1.1 and 1.1.2 shall be adopted for provision of space for sub-station.

1.1.1 Area Requirements for Sub-Station for buildings

| S.No | Total covered area(in sq.m) | Transformer capacity(in KVA) | Substation Size required(in sq.m) |
|---|---|---|---|
| 1 | 2500 | 1 X 400 | 70 |
| 2 | 4500 | 1 X 630 | 70 |
| 3 | 8000 | 2 X 630 | 100 |
| 4 | 10,000 | 2 X 630 | 130 |
| 5 | 15,000 | 4 X 630 | 160 |
| 6 | 20,000 | 5 X 630 | 175 |
| 7 | 25,000 | 6 X 630 | 200 |
| 8 | 30,000 | 7 X 630 | 220 |

**Notes:**

1 For additional 1000 sq.mt. Covered area, a load of 90 KVA will come up with 150 KVA TR. Capacity at 60 % loading.

2. For additional of one transformer as per covered area, a space of additional 16 sq.m is to be provided.

3. In case of any deviation in space size due to unavoidable circumstance, the same shallbe considered with the approval of Electricity Board.

4. The floor of the sub-station shall have cable trenches of 0.6 m depth, the layout for which will be given at the time of actual construction. For this purpose, a dummy floor of 0.6 m depth shall be provided to facilitate cutting/digging of floor for installation of equipment's and making subsequent changes in trenches. This floor shall be capable to withstand minimum load of 10 tones of each transformer mounted on flour wheels. The break-up spaces required for different installations in a sub-station are given asbelow:

a) Supply company's Switchgear room and or space of meters.

b) **Transformer Rooms:** The number and size of transformer rooms shall be ascertained from the total power requirements of the company. To determine the size of transformer and clearance around a transformer, reference shallbe made to good practice (I.S.1887-1967 code of practice for installation and maintenance of Transformer). A 500 KVA transformer shallbe provided with a minimum space of 4 m x 4 m. If transformer is to be installed outdoor space shall be provided on similar considerations and adequate provision for safety enclosure is to be made. Transformer can be installed inside or outside provided movement of fire tender is unobstructed. For transformer having large oil content (more than 2000 lt.) soak pits are to be provided in accordance with rule 64 of Indian Electricity Rules, 1956. Only dry type transformer shall be permitted if installed in 1st basement.

c) **High Voltage Switch Rooms –** In case of sub-station having one transformer, the owner is required to provide only one high voltage switch. In the case of single point supply for two transformers, the number of switches required is 3 and for 'n' transformers the number of switches is n+1. The floor area required in case of a single switch will be roughly 4 m x 1m and for every additional switch the length should be increased by 1mt.

d) **Low Voltage Switch Rooms –** The floor area requirement in respect of low voltage switchgear room cannot be determined by any formula.

e) **Room for Stand-by-Generator –** A room space not less than 6 m x 9 m shallbe provided for housing a standby Generator set of 50 KW.

1.1.1 **A: Location of electric sub-station in basement of multistoried buildings:**

The electric sub-station should be provided in the approved/sanctioned covered area of the buildings not below the first basement level and should be on the periphery of the building with clear independent round the clock approach having proper ramp with slope.

1.1.2. **Other Requirements for Sub-station**

a) The sub-station will preferably be located on the ground level failing which it can be in the basement floor in no case at higher level.

b) Substation can be split at various levels as per space availability.

c) The minimum width of the sub-station space shall not be less than 6 m.

d) The areas given above in respect of the different categories of rooms hold good if they are provided with windows and independent access doors.

e) All the rooms should be provided with partition up to the Ceilings and shall have proper ventilation. Special care should be taken to ventilate the transformer rooms and where necessary, louvers at lower levels and exhaust fans at higher level shall be provided at suitable locations.

f) In order to prevent storm water entering the transformer and switch rooms through the soak pits, the floor level of the sub-station shall be at least 15 cm above the highest flood water level that may be anticipated in the locality.

g) DG & panels to roof : Allowed on roof and setback provided movement of fire tender is unobstructed

1.2 **Cable Trenches Shafts Etc.**

1.2.1 Suitable number of vertical shafts, rising mains, distribution boxes, etc. shall also be provided as per the requirements at suitable location. Cable trenches with suitable handy covers for entry of the cables up to the substation onwards up to the street adjoining other building shall also be provided as per the requirements. These vertical shafts, rising mains, distribution boxes, cable trenches, etc. shall be so constructed as to be accessible only to authorized personnel. The rising mains and other installations in the vertical shafts, tap off boxes distribution boxes etc. required at each floor shall be provided, installed and maintained by the owner at their own cost.

Adequate enclosed space shall also be provided at each floor for installation of equipment's for distribution on respective floors such as distribution boxes, cut-out, and meter boxes and main switches.

1.2.2 ***Location of Switch Room:*** In large installations other than where a sub-station is provided, a separate switch room shall be provided. This shall be located as closely possible to the electrical load center and suitable ducts shall be laid with minimum number of bends form the point of entry of the supply to the position of the main switchgear. The switch room shall also be placed in such a position that rising ducts may readily be provided there from to the upper floors of the building in one straight vertical run. In larger building, more than one rising duct and horizontal ducts may also be required for running cables from the switch room to the foot of each rising main. Such cable ducts shall be reserved for the electrical services only, which may, however, include medium and low voltage installations, such as call bell systems. Telephone installation should be suitably segregated.

1.2.3 **Location and Requirement of Distribution Panels:** The electrical gear distribution panels and other apparatus, which are required on such floor, shallconveniently be mounted adjacent to the rising mains, and adequate space should be provided at each floor for this purpose.

1.2.4 **Location and Requirement of PBX/PABX Room:** Information regarding provision and location of PBX/PABX room, telephone outlets and riser shall be ascertained form the relevant Authority/ concerned local body. Adequate space should be provided for installation of Sub-Distribution Board.

1.3. **General**

1.3.1 The maintenance of the built up space for electric sub-station, distribution equipment, Vertical shafts and enclosure at each floor shall be done by the owner. The standby arrangement for electricity supply up to and including the sub-station equipment and distribution pillars at the sub-station shall be provided compulsorily.

# ANNEXURE – X

**Provisions for Green Building** (Please refer Chapter 10 of this document)

1. **Water Conservation and Management**- Bye laws: 10.2 (1)

Considering an ever increasing demand for water, efforts are needed to substantially reduce water consumption in buildings. Integrated and sustainable water management focusing on least anthropogenic water discharge from human activities should be pursued. The use of water conserving fixtures, landscaping, rain water harvesting, aquifer recharging and waste-water recycling need to be given due consideration.

**a. Rain Water Harvesting from roof and non-roof areas (by Recharge)**

Design rainwater harvesting system to capture at least 'peak-month rainfall' runoff volume from roof and non-roof areas.

**b. Low Water Consumption Plumbing Fixtures**

Use water efficient plumbing fixtures (as applicable) whose flow rates meet the baseline criteria in aggregate. The total annual water consumption of the building should not exceed the total base case water consumption computed. The baseline criteria are as below:

Table 8: Baseline Flow Rates / Consumption for Plumbing Fixtures

| S. No. | Fixture Type | Maximum Flow Rate / Consumption | Duration Estimated Daily Uses per FTE** |
|---|---|---|---|
| 1 | Water Closet (Full Flush) | 6 LPF | 1 for male<br>1 for female |
| 2 | Water Closet (Half Flush) | 3 LPF | 2 for female |
| 3 | Urinals | 4 LPF | 2 for male |
| 4 | Faucets / Taps* | 6 LPF | 4 |
| 5 | Health Faucet* | 6 LPF | 1 |
| 6 | Shower Head / Handheld Spray* | 10 LPF | 0.1 |

Source: Uniform Plumbing Code – India

**Notes:**

1. LPF: Litre per flush
2. *Reporting pressure for these fixtures shall be at 3 bar.
3. **Full Time Equivalent (FTE) represents a regular building occupant who spends 8 hours per day in the building. Part-time or overtime occupants have FTE values based on their hours per day divided by 8.
4. Plumbing fixtures certified by IGBC under Green Product Certification Programme can be used by the project to show compliance, as and when certified fixtures are available

As per MoEF&CC guidelines, water reduction can be achieved up to 36% using water conserving fittings with sensors, auto valves, pressure reducing device wherever possible which can result in significant reduction in water consumption.

**i. Water closets (WCs):**

- Conventional toilets use 9 litres of water per flush. Low flush toilets are available with flow rate of 6.0 litres and 3.0 litres of water per flush.
- Dual flush adapters can be used for standard flushing for solid waste and a modified small flush for liquid waste
- Flush valves with 20-25 mm inlets can be used for restricting the water flow

**ii. WC faucets, wash basin taps, and kitchen taps:**

- Faucets and taps can have flow rates upto 25 litre/min. The flow rate can be reduced without compromising on the water pressure by having restrictors, pressure inhibitors and aerators. Auto control valves can further help in reducing wastage.
- Pressure reducing device: Use of aerators can result in flow rates as low as 2 litre/min, which is adequate for hand washing purpose.
- Auto control valves: Installation of magic eye solenoid valve (self-operating valve) can result in water savings. The sensor taps has automatic on and off flow control. It functions with parameters such as distance and timing.

**iii. Urinals:**

- The conventional urinals use water at a rate of 7.5-11 litres per flush.
- Low flush urinals use only 2 litre/flush
- Use of electronic flushing system or magic eye sensor can further reduce the flow of water to 0.4 litres per flush
- Waterless urinals use no water

**iv. Shower heads:**

- Conventional showerheads can deliver water at flow rates above 25litres/min.
- A perfectly pleasant shower can however, be obtained with flow rates well below 10 litres / min.
- Shower heads fitted with aerators and pressure regulators can reduce flow rates as low as 4.5litrs/min and their use will show a significant saving.

**c. Waste Water Recycle and Reuse**

i. **Waste Water Treatment:** Design an on-site treatment system to handle 100% of waste water generated in the building, to the quality standards suitable for reuse, as prescribed by Central (or) State Pollution Control Board, as applicable.

ii. **Waste Water Reuse:** Use treated waste water for at least 25% of the total water required for landscaping, flushing, and cooling tower make-up water (if the project uses water-cooled chillers).The treated waste water could be used for landscaping, flushing and air-conditioning.

**Notes:**

1. Waste water here refers to both grey and black water
2. Waste water can be treated in-situ and reused in-situ

3. In case the local authorities insist the project to divert waste water to a centralized/ common waste water treatment plant, then the project can show compliance, by reusing treated wastewater from the centralized/ common/ any other waste water treatment plant

4. Treated waste water from other sites/ local authorities through permanent piped connections or other means can also be considered to show compliance

5. Captured rain water can also be considered to show compliance

6. The water requirement and average number of watering days for landscaping shall be considered as 6 liters per sq.m. per day (i.e. 6 liters/ sq.m./ day) for a minimum of 300 days (or) Justify if the water requirement and the average number of watering days for landscaping is less than the above requirement.

**d. Reduction of hardscape**

At least 50% of the total paved area on site should either be soft-paved and/or shaded under trees/ pergolas/ solar photovoltaics, etc.

**Note:**

1. Limit use of turf on the site to conserve water and/ or ensure that landscaped area is planted with drought tolerant / native / adaptive species.

2. Avoid disturbance to the site by retaining natural topography (and/ or) design vegetated spaces on the ground, for at least 15% of the site area.

3. Restore disturbed site area by designing vegetated spaces over built structures and on the ground, for at least 30% of the site area (including development footprint).

4. Preserve or transplant at least 75% of existing fully grown trees within the project site / campus.

5. Plant tree saplings that can mature into fully grown up trees within the next 5 years on the project site, as per the below criteria (including existing and transplanted trees in the project site).

6. The landscape here refers to soft landscaping which includes only pervious vegetation.

7. Areas planted with turf should not exceed a slope of 25 percent (i.e., a 4:1 slope).

8. Landscape areas over built structures such as basements, podium, roofs, etc., can be considered for the calculation.

9. Retaining 'Natural Topography' in its broad sense means preserving the natural features of the terrain such as exposed natural rocks, water body, etc.,

10. Grass medians, grass pavers, jogging track, open-air theatre, parking areas, driveways, walkways, playground, swimming pool, etc., are considered as site disturbances.

11. Native / adaptive vegetation shall be retained as much as possible.

12. Potted plants shall not be considered as vegetation.

**2. Solar Energy Utilization Bye laws: 10.2 (2)**

All efforts need to be made towards optimum and efficient use of energy sources for life sustenance. The increasing thrust on using non-fossil fuel energy for all needs have to be given priority consideration. The tapping of renewable sources of energy for lighting, heating, cooling and ventilation needs, deserve special attention.

**Note:** For captive solar power generation, a minimum of 15 % of sanctioned load is the requirement.

**a. Installation of Solar Photovoltaic Panels**

Solar photovoltaic (PV) systems are direct energy conversion systems that convert solar radiation into electric energy. Roof of buildings as well as other exposed areas such as of parking shade, vertical/inclined walls, windows can be installed with solar PV system. can be installed with solar PV system.

**b. Installation of Solar Assisted Water Heating Systems**

i. Solar water heating systems should be made in the building for hospitals, hotels, hostels, guest houses, police men/ army barracks, canteens, laboratories and research institutions, schools and colleges and other institutes.

ii. The solar water heating system should be mandatory in the hospitals and hotels, where the hot water requirements are of continuous nature. These buildings must be provided with auxiliary back-up system.

iii. The use of solar water heating system is recommended in the following type of buildings in Government/ Semi-Government and Institutional buildings where the hot water requirements may not be continuous/ permanent.

- Guest Houses
- Police men/Army barracks
- Canteens
- Laboratory & Research Institutions where hot water is needed.
- Hostels, Schools, Colleges and Other Institutes.

iv. The Installation of the electrical back up in all such water heating system shall be optional depending on the nature of requirements of the hot water.

v. It is suggested that solar heating systems of the capacity of about 100 liters per day based on thermos phonic with necessary electrical back-up be installed at residential buildings like hostels.

vi. In order to facilitate the installation of the solar water heating systems, the new buildings shall have the following provisions:

vii. All such buildings where solar water heating systems are to be installed will have open sunny roof area available for installation of solar water heating system.

- The roof loading adopted in the design of such building should be at least 50 kg per sq. m. for the installation of solar water heating system.
- A solar water heating system can also be integrated with the building design. These either can be put on the parapet or could be integrated with the south facing vertical wall of the building. The best inclination of the collector for regular use throughout the year is equal to the local latitude of the place. The Collectors should be facing south. However, for only winter use the optimum inclination of the Collector would be (Latitude + 15 degrees of the south.). Even if the Collectors are built in south facing vertical wall of building the output from such Collectors during winter month is expected to be within 32% output from the optimum inclined Collector.

- All the new buildings to be constructed shall have an installed hot water line from the rooftop and insulated distribution pipelines to each of the points where hot water is required in the building.
- The capacity of the solar water heating system to be installed on the building shall be described on the basis of the average occupancy of the building. The norms for hospitals, hotels and other functional buildings are given below:

Table 9: Recommended capacity in various types of Buildings

| Sr. No. | Type of Buildings | Capacity recommended - liters per capita per day |
|---|---|---|
| 1 | Hospitals | 100 |
| 2 | Hotels | 150 |
| 3 | Hostels & other such Building | 25 |
| 4 | Canteen | As required |
| 5 | Laboratory & Research Institutions | As required |

- An Open area of 3 sq.m would be required for installation of a collector which supplies about 100 liters of water per day. At least 60% of the roof area may be utilized for installation of the system.
- The specification for the solar water heating system laid down by the Ministry of Non-Conventional Energy Sources can be followed. Flat plate collector confirming to Bureau of Indian Standards - latest standard should be used in all such solar water heating systems.

**3. Energy Efficiency Bye laws: 10.2 (3)**

**a. Low Energy Consumption Lighting Fixtures**

Lamps, luminaries, ballasts and the controlling systems should be monitored for achieving energy efficiency through artificial lighting.

**i. Interior Lighting**

- For Residential Buildings
  - ➢ Lamps – Lamps used for general lighting scheme shall conform to the following
  - - Point Light Source – All the point light sources installed in the building for general lighting shall be CFL or LEDs or equivalent.
  - - Linear Light Source – All the linear light sources installed in the building for general lighting shall be T-5 or at least 4 Star BEE rated TFLs or equivalent
  - ➢ The installed interior lighting power shall not exceed the LPD (lighting power density) value as recommended by ECBC 2007 (Chapter 7, section 7.3)
- For buildings other than residential
  - ➢ Lamps – Lamps used for general lighting shall conform to the following
  - - Point Light Source – All the point light sources installed in the building for general lighting shall be CFL or LEDs or equivalent.
  - - Linear Light Source – All the linear light sources installed in the building for general lighting shall be T-5 or at least 4 Star BEE rated TFLs or equivalent

- The installed interior lighting power shall not exceed the LPD (lighting power density) value as recommended by ECBC 2007 (Chapter 7, section 7.3)
- Lighting controls shall be installed as recommended by ECBC 2007 (Chapter 7, section 7.2.1) in buildings with connected load of 100 kW or more.

* Exemption to (a) – Spaces in the building where high bay lighting is required

**ii. Exterior Lighting**

For Commercial, Multi-storey Residential Complexes, Group Housing Societies, Apartment complexes, etc.

- Lamps – External lighting sources shall have minimum luminous efficacies as per the table given below

Table 10: Minimum allowable luminous efficacy of various light sources

| S No. | Light Source | Minimum allowable luminous efficacy (lm/W) |
|---|---|---|
| 1 | CFLs (compact fluorescent lamps) | 50 |
| 2 | LEDs (light emitting diodes) | 50 |
| 3 | Fluorescent Lamps | 75 |
| 4 | Metal Halide Lamps | 75 |
| 5 | High Pressure Sodium Vapour Lamps | 90 |

- The installed exterior lighting power density for the respective applications shall be in accordance with ECBC 2007 (Chapter 7, section 7.4)
- Lighting controls shall be installed as recommended by ECBC 2007 for external lighting (Chapter 7, section 7.2.1.4)

**b. Energy Efficiency in HVAC systems design (Applicable to all use premises) (mandatory for commercial and desirable for residential):**

Energy efficiency in HVAC system design for buildings

- The inside design conditions of a conditioned space shall conform to National Building Code 2005 (Part 8, section 3)
- The outside design conditions shall conform to National Building Code 2005 (Part 8, section 3)
- Efficiency of the equipment installed shall comply with ECBC 2007 requirement (Chapter 5, section 5.2.2)
- The distributed cooling systems (Unitary air conditioners/ Split air conditioners) shall be at least BEE 3 Star rated products.
- To avoid the conductive heat losses through piping and ductwork insulation shall be provided as recommended by ECBC 2007 (section 5.2.4)

**4. Waste Management Bye laws: 10.2 (4)**

Facilitate segregation of waste at source to encourage reuse or recycling of materials, thereby avoiding waste being sent to landfills.

**a. Segregation of Waste**

i. **Building-level Facility** - Provide separate bins to collect dry waste (paper, plastic, metals, glass, etc.,) and wet waste (organic), at all the floors and common areas of the building, as applicable. Divert the collected waste to a centralized facility, which is easily accessible for hauling.

ii. Centralized Facility - In addition to dry and wet waste bins, provide separate bins for safe disposal of the following hazardous waste, at the centralized facility:

- Batteries
- 'e' waste
- Lamps
- Medical waste, if any

**Note:** The project has to follow the Hazardous Waste Management Guidelines as prescribed by the Ministry of Environment & Forest (MoEF), Government of India.

**b. Organic Waste Management**

Ensure effective organic waste management, so as to avoid domestic waste being sent to landfills and to improve sanitation & health. Install an on-site waste treatment system for handling at least 50% of the organic and landscape waste generated in the building (including tenant-occupied areas). The generated manure or biogas shall be utilized as appropriate.

**Note:**

*For calculation, food waste can be considered as 0.1 kg per person per day (i.e. 0.1 kg/ person/ day) or as prescribed by the local byelaw, whichever is more stringent; landscaped waste can be considered as 0.25 kg per sq.m per day (i.e. 0.25 kg/ sq.m/ day).*

**5. Installation of Solar Photo Voltaic Panel**

The installation of Solar Photo Voltaic Power Plant is mandatory for residential and non

Residential Building in Delhi.

Table 11: Minimum area required for Installation of Solar Photo Voltaic Panel

| S. No. | Building category | Plot area/ Ground Coverage | | Capacity of SPV plant (in kilo watt peak | Area of Terrace required in % & Sqm. | |
|---|---|---|---|---|---|---|
| 1. | Residential | 105 -250 Sqm. | 75% | 1 KW p(spv) | 20% | 15 Sqm. |
| | | 250 -500 Sqm. | | 2 KW p (spv) | 20% | 30 Sqm. |
| | | 500-1000 Sqm. | 50% | 3 KW p (spv) | 20% | 45 Sqm. |
| | | 1000-3000 Sqm. | | 5 KW p (spv) | 15% | 75 Sqm. |
| | | > 3000 Sqm. | | 10 KW p (spv) | 15% | 150 Sqm. |
| | | | | | | |
| 2. | Institutional | 500-1000 Sqm. | 30% | 5 KW p (spv) | 35% | 75 Sqm. |
| | | 1000-3000 Sqm. | | 10 KW p (spv) | 35% | 150 Sqm. |
| | | >3000 Sqm. | | 20 KW p (spv) | 35% | 300 Sqm. |
| | | | | | | |
| 3. | Government Buildings | 500-1000 Sqm. | 50% | 5 KW p (spv) | 30% | 75 Sqm. |
| | | 1000-3000 Sqm. | | 10 KW p (spv) | 15% | 150 Sqm. |
| | | >3000 Sqm. | | 20 KW p (spv) | 20% | 300 Sqm. |
| | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 4. | Commercial | 500-1000 Sqm. | 50% | 5 KW p (spv) | 40% | 150 Sqm |
| | | 1000-3000 Sqm. | | 20 KW p (spv) | 30% | 300 Sqm |
| | | >3000-5000 Sqm. | | 30 KW p (spv) | 25% | 450 Sqm |
| | | > 5000 Sqm. | | 50 KW p (spv) | 30% | 750 Sqm. |
| | | | | | | |
| 5. | Group Hosing | 2000-5000 Sqm. | 33.3 % | 10 KW p (spv) | 20% | 150 Sqm. |
| | | 5000-10,000 Sqm. | | 20 KW p (spv) | 15% | 300 Sqm. |
| | | 10,000-20,000 sqm. | | 50 KW p (spv) | 25% | 750 Sqm. |
| | | >20,000 Sqm. | | 100 KW p (spv) | 25% | 1500Sqm |
| | | | | | | |
| 6. | Industrial | Up to 400 Sqm. | 60% | 3 KW p | 25% | 45 Sqm |
| | | 401-2000 Sqm. | 50% | 5 KW p | 30% | 75 Sqm |
| | | 2000-5000 Sqm | | 10 KW p | 30% | 150 Sqm |
| | | >5000 Sqm. | | 50 KW p +5 KW/1000 Sqm. or part thereof | 30% | 750 Sqm |

**6. Explanatory Note on Electric Vehicle Charging Infrastructure**

**Appendix I**

**Table 10.3: Charging Infrastructure requirements for PCS (commercial use)**

| | | | | |
|---|---|---|---|---|
| Building Type | Any Building type | | | |
| Ownership of Station | Service provider | | | |
| Connection and Metering | Commercial Metering and Payment | | | |
| Types of Charger | as per min. requirements specified in MoP Guidelines (refer Annexure IV) | | | |
| Additional chargers | PCS service providers shall install additional number of kiosk/chargers beyond the minimum specified requirements to meet the ratio of charging points as prescribed below (by the type of vehicles). | | | |
| Norms of Provisions for charging points | 4Ws<br>1 SC - each 3 EVs<br>1 FC - each 10EVs | 3Ws<br>1 SC - each 2 EVs | 2Ws<br>1 SC - each 2 EVs | PV (Buses)<br>1 FC - each 10 EVs |

Note:

- *Charging bays shall be planned currently at 20% capacity of all vehicles including 2Ws and PVs(cars)*
- *Open metering and on-spot payment options to be available for all users.*
- *Provision of FCB CS and BS shall not be mandatory, and will be at the discretion of the service provider.*

**Appendix II**

**Explanatory Note on Electric Vehicle Charging Infrastructure**

**A. Rationale for EVCI establishment**

Rapid urbanization coupled with adoption of mechanized transportation modes has resulted in high emissions of Green House Gases that goes on to impact Global warming. Unless, the global surface temperature rise is restricted to no more

than 2oC compared with pre-industrial levels, the IPCC has warned that the world will see irreversible catastrophic climate change.

India being a signatory to the UNFCCC, has pledged for efforts to assess the Greenhouse Gas Emissions (GHG) of anthropogenic origin and removal by sinks. India's per capita emissions are still considered low at 1.9 tonnes (2013), but its total emissions are next only to China and the US and is likely to overtake those of the EU by 2019.

While comparing the Indian cities for their emission scores, Delhi is on top as the biggest emitter at over 38 38 million tonnes of carbon dioxide equivalent overall emissions, followed by Greater Mumbai at 22.7 million tonnes and Chennai at 22.1 million tonnes, Kolkata at 14.8million tonnes, Bangalore at 19.8million tonnes, Hyderabad at 13.7 million tonnes and Ahmedabad at 9million tonnes were the other cities whose emissions for the year were calculated sector wise.

As per the statistics of Transport Department (GNCTD), total number of vehicles in Delhi is more than the combined total vehicles in Mumbai, Chennai and Kolkata. Delhi has 85 private cars per 1000 population against the national average of 8 cars per 1000 population. In terms of CO2 emissions due to motor vehicles, Delhi emits about 12.4 million tonnes while the city of Bengaluru emits about 8.6 million tonnes.

Therefore, addressing the quantum of emissions from the "Transport" and "Domestic" sector emerges to be the high priority subjects under the overarching umbrella of "Climate change mitigation" as committed to the UNFCC.

Encouraging "Electric Vehicles" as a viable option for phased transportation in terms of short and long distance trips with appropriate "Charging Infrastructure" is therefore, the pre-condition for this paradigm shift / phased migration to sustainable transportation.

For this changes are required in Infrastructure provisions (at Regional and City levels) and in Development Control Regulations (in terms of provisions therein) to include the formulations of norms and standards for "Charging Infrastructure" in the said Mater Plan Regulations and State Bye-Laws for adoption across the country suiting local conditions.

## B. EV Charging Technology

### B.1 Electric Vehicle Supply Equipment (EVSE):

An EVSE is a wall mounted box that supplies electric energy for recharging of electric vehicle batteries. Also EVSEs have a safety lock-out feature that does not allow current to flow from the device until the plug is physically inserted into the car.

EVSEs can be customized with added features like:

- Authentication
- Integrated payment gateways
- Software for remote monitoring.

As electric vehicle charging technology continues to advance, several standards and guidelines have become widely accepted across the industry. This section gives a brief overview of charging infrastructure technology, standards, and terminology.

### B.2 Different types of EVSE:

**Charging speeds**- Charging power, which determines the time required to charge a vehicle, can vary by orders of magnitude across charge points, as shown in Table 1. A small household outlet may charge as slowly as 1.2 kW, while the most advanced rapid charging stations can charge at up to 350 kW. Charging infrastructure is broadly broken into three categories based on speed: Level 1, Level 2, and direct current (DC) fast charging (sometimes referred to as Level 3).

**Private Charging**

Charging batteries of privately owned cars through domestic charging points. Billing is mostly part of home/domestic metering.

**AC "Slow" Charging:**

The home private chargers are generally used with 230V/15A single phase plug which can deliver a maximum of up to about 2.5KW of power. The EVSE supplies AC current to the vehicle's onboard charger which in turn converts the AC power to DC allowing the battery to be charged.

**Public Charging**

For charging outside the home premises, electric power needs to be billed and payment needs to be collected. The power drawn by these chargers may need to be managed from time to time.

**DC "Fast" Charging:**

DC current is sent to the electric car's battery directly via the charge port. FC chargers (usually 50 KW or more) can supply 100 or more kilometers of range per hour of charging. The fast chargers would generally be used as a top-up, rather than fully charging vehicles. These are important for cab companies and corporate users who have a fleet of electric cars.

**C. Options for EV Charging**

There is an urgent need to offer flexible charging infrastructure for different vehicle segments to drive adoption of EVs. Charging infrastructure is the most crucial enabler in the entire EV value chain. The exploration of different charging models according to the local conditions shall enable faster deployment of electric vehicles in the country.

**EV share in all vehicles** - It has been broadly projected that by the current rate of adoption of EVs, about 15% of all vehicles in the country would be EVs by the year 2020. Therefore, while assuming percentage composition of all proposed capacities in Public facilities of vehicle holding capacity, the Metropolitan and 'Tier I' cities will be assumed to have a higher percentage share of EVs, say 20% for now. The charging infrastructure prescriptions in all urban development guidelines shall, therefore, be in consonance with the said percentage.

**Power Load sanction to premises –** While adding these Charging Infrastructures to the proposed set of building types of the Indian cities, enhanced Power Load shall have to be had for each such building type by the Power DISCOMs, commensurate to the total additional power requirement of simultaneous operation of all the prescribed charging points in the premise. With further advancement of charging technologies and the enhanced capacity of chargers to draw more power, it is advised that the load capacity assigned to each premise should be kept with a safety factor of 1.25 with a long-term vision of 30 years.

Table 12: EVs charging "modes" and 'availability'

| Vehicle type | Slow Charging | Fast Charging | Public CI |
|---|---|---|---|
| 2 Wheelers | Y | N | Yes/Limited |
| 3 Wheelers | Y | N | Yes/Limited |
| PVs (Cars) | Y | Y | Yes |
| PVs (Buses) | N | Y | Yes |

Table 13: Charging options for EV types (by ownership)

| Vehicle type | Private CI | Public CS | Predominant place of charging |
|---|---|---|---|
| 2 Wheelers | SC/BS | SC | Point of residence / Work |
| 3 Wheelers | SC/BS | SC/BS | Residence / Parking stations |
| PVs (Cars) | SC/BS | FC | Residence / Point of work / other public places |
| PVs (Buses) | - | FC/BS | Bus Terminals/Depots |

**Note:**

- *The option of Battery Swapping (BS) for privately owned 2Ws and PV(Cars) is limited to Private CI.*
- *For 3 Ws the BS is proposed to be made available in PCS, for faster recharge experience only*
- *For PV (Buses), Captive Fast charging infrastructure for 100% internal use for fleets may be adopted by privately owned Depots/Garages.*

Based on the above stated EV charging technologies available and the current trend of evolving technologies of faster charging experience, the Ministry of Power has issued ***Guidelines and Standards for setting up Charging Infrastructure for Electric Vehicles*** for charging infrastructure to be installed at every Public Charging Station (PCS).'Connectivity regulations and Safety norms' shall be defined by respective authorities such as Central Electric Authority/MoP for grid access to such PCS / any other charging station/infrastructure.

**D. Charger Specifications and PCS Infrastructure**

Any installed PCS shall have one or more electric kiosk/boards with installation of all charger models as prescribed in the ***Guidelines and Standards notified by Ministry of Power, dated 14 December 2018 and revised Guidelines & Standards, dated 1st October 2019*** for ***"Charging Infrastructure for EVs",*** with other necessary arrangements as deemed necessary.

Public Charging Station service providers shall be free to create charging hubs and to install additional number of kiosk/ chargers in addition to the minimum chargers prescribed vide the MoP Guidelines, including options for installation of additional chargers, if required.

**Note:**

1. *Minimum infrastructure requirements do not apply to Private Charging Points meant for self-use of individual EV owners (non-commercial basis).*
2. *Captive charging infrastructure for 100% internal use for a company's own fleet will not be required to install all type of chargers and to have NSP tie ups.*

**E. Location of PCS / FCB CS in local area / building precincts**

In accordance with the Guidelines issued by the Ministry of Power (MoP), following minimum standards with regard to density of / distance between PCS in local level facilities in building premise / urban precincts shall be followed.

i. At the Local levels (within the urban area):

- At least 1Public Charging Station is to be available within a grid of 3Km x 3Km.

ii. At the Building premise levels (for various building types)

- Private charging infrastructure (non-commercial use) for individuals.
- For all commercial modes of charging EVs, at least 1PCS, as per minimum specifications laid under MoP guidelines.
- Standalone Battery Swapping Stations may be added with the PCs.

# ANNEXURE-XI

**Guidelines for Integration of Art in Building Projects** (Please refer Chapter 13 of this document)

Art has always been an integral part of man's living spaces. From ancient times, the most attractive architecture has invariably provided for adequate expression of artistic forms. The elites built their buildings with liberal use of the design ideas of local craftsmanship; the common man displayed his artistic sensibilities often by using his own craftsmanship. Tribal and rural societies were and still are very conscious about the integral role of art in their design forms. However, scientific and technological progress, industrialization and specialization have tended to separate art from architecture. The construction methods of the modern industrial age and the development of mass housing in stereotyped dull forms have tended to segregate art from the built form and have thereby left both art and architecture much the poorer for it.

The Delhi Urban Art Commission has from time to time emphasized the need for incorporating works of art in building projects and in many cases has received encouraging response. There is a growing feeling among city administrators, artists, art critics and enlightened citizens that greater concerted efforts need to be made to incorporate art in the design of development projects in the nation's capital New Delhi in particular and the country in general.

With a view to creating wider awareness of this issue among concerned persons, and to promote incorporation of art in the built form the Delhi Urban Art Commission has decided to issue the specific guidelines given below.

**1. Building as an Art Form**

While trying to re-establish the relationship of art and built habitat, it has to be recognized that the prime form of man's art is the building itself, be it a monument or a modest family home. The proportion of buildings and their relationship to one another, the scale of public and private open space, the patterns created by openings and apertures, the materials used and their textures and finishes, the landscape and the environment should all be perceived as expression of art.

The structure of the building itself can often make a strong statement of aesthetic expression without the need for ant establishment. A bridge or an overpass, carefully designed, can be as beautiful as the sculpture of a great artist. There can be no stronger expression of art in a building that the purity of its structural form and the honesty of its expression.

Inexpensive material, sensitivity used and allowed to reveal their original texture, can create highly aesthetics patterns and forms. By using local material and adopting simple construction practices, architects have been able to create inexpensive yet elegant buildings. The tendency, occasionally seen today, to design and construct buildings under the influence of contemporary architecture and then clad them with rustic materials to give them a traditional a traditional look divorces appearance from reality and undermines the basis of architecture as an honest art form. While mixing of materials and architectural designs might be appropriate in certain situations, the promoters and architects of buildings should recognize the limitations inherent in such approaches and, wherever feasible, try to re-establish the purity of form, structure and materials.

## 2. Building and Craft

Until the earlier part of this century, the expression of art in buildings was largely through crafts. Craftsmen, such as stone workers, wood carvers, metal workers and potters enhanced the aesthetic value of buildings through their creative work. The building artisan himself was, to a large extent, a craftsman who wielded his trowel in a way that gave life to the brick and stone work. Hence art appeared in buildings not as an appendage but as an integral part of the building activity itself.

It is often difficult to say where craft ends and art begins. Thus, any effort to weave art into the built form should begin with the revival of crafts as an integral part of the building activity. Such integration can manifest itself in brick and stone work, trellises, patterns of paving, street furniture and so on. The aesthetic effect of this can be seen not only on monumental buildings but also on ordinary dwelling; the economic and social impacts include a major boost to the revival of traditional crafts and ideas and providing employment to local craftsmen.

## 3. Art as integral to Building

While promoting art in the built form, a mistake often made is to treat it as an appendage, to be conceived and added on after the building is completed. The policy of earmarking one to two per cent of the building costs for works of art in one sense relegates art to being a separate activity. As a matter of fact, affixing murals on blank walls and placing sculptures in vacant spaces in buildings as an afterthought has not, in many buildings done sufficient justice to either the works of art or to the building itself. The process of buildings is itself a creative activity and the expression of the human spirit in material form. Specific provision for works of art as a percentage of the cost of the building work is made only to ensure that the conception and incorporation of art becomes an integral part of the design and building process.

## 4. Scope of Art in Building Projects

There are various art forms which can have relevance to building projects. These can broadly be classified as follows:

1. Outdoor sculptures
2. Water fountain sculptures
3. Various landscape and street furniture elements such as railings, gates, compound walls, lighting, tree guards, screens, balustrades, hard and soft surfaces, steps, mosaic or other paved floors, plazas, courts, etc.
4. Murals and frescos
5. Mobiles and bas-relief
6. Folk and Tribal Art
7. Artisan art made of materials such as brick, concrete, cement blocks, hardware, etc.
8. Indoor sculptures
9. Paintings
10. Tapestry, wall hangings and floor coverings
11. Functional elements, such as screens, notice boards, counters, drinking water fountains, etc.
12. Other art forms relevant to the habitat.

One or more of the art forms mentioned above may be on interest depending upon the nature of a building project. In individual homes, artisan, folks or tribal arts and crafts may be appropriate. In a commercial complex or a residential neighborhood, practically all the types of art forms may have relevance. The cost of the functional elements, however, should be built into the cost of the building project and not into the funds earmarked for works of art.

**5. Role of Local Authorities**

The Delhi urban Art Commission urges the Delhi Development Authority (DDA), civic authorities, central and state government departments, promoters of public and private institutions, private developers, individual builders and home owners that in all commercial, industrial, institutional, office and housing projects executed by public authorities or private developers, expenditure up to two per cent but not less than one per cent of the cost of the building works should be provided for works of art. Design proposals submitted to the Delhi Urban Art Commission must outline how the sum of money allocated to art is to be utilized. Local authorities, while giving building approvals, should see that the scheme for incorporation of art, as approved by the Delhi Urban Art Commission, is effectively implemented.

# ANNEXURE-XII

**Simplified Procedure for Government Building Plan Sanction (Please refer Chapter 2.1.2 (c),2.6.2 (c) & 3.1.10 of this document)**

**UNDERTAKING – 1**

**Undertaking of Architect**

I, _____, occupation Architect, office at_____ directed / engaged by the authorized authority do hereby solemnly affirm and declare as under:

1. That, I _____ _____Architect by profession and working at the _____ OR Architect (registered) with the Council of Architects vide registration no. _____.
2. That I have been engaged as an Architect for preparing the building plans and to supervise construction till its completion in respect of Plot No, _____ Block No. _____ situated at _____.
3. That I have prepared the building plans in respect of the aforesaid plot.
4. That I have studied the layout plan of the colony and have gone through the instructions, policy decisions and other relevant documents in respect of the plot and the colony.
5. That I have personally inspected the site, which forms part of the approved layout plan with respect to its location, size, shape and area of the plot and is proposed land use is also in conformity with the approved layout plan. The plot has been demarcated at site and the site and the size, shape and areas of plot available at site tallies with the approved layout plan.
6. That the ownership documents are I shape of registered sale-deed/lease deed in favor of the applicant and have been thoroughly examined and the ownership in favor of the applicant is in order.
7. That there is no construction in existence at the plot and no construction shall commenced before sanction of the building plans.
8. That there is no encroachment on the municipal land/road/other property and road widths as shown in the layout plan are available at site.

9. That the proposals are in conformity with the terms and conditions of lease-deed which is still operative and period of construction as per lease-deed and the extension granted by the Lessor is valid upto _____.

10. That the proposals have been prepared strictly in accordance with these building Bye-law, rules, regulations and practice of the Department and no mis interpretation or inference of Provisions of these Unified Building Bye-Laws has been exercised while preparing the plans. The construction shall be carried out strictly in accordance with the sanctioned building plans and in case any deviation is carried out, I shall inform the sanctioning authority immediately.

11. That in case of appointment of other Architect I the Project at any stage whatsoever, I shall inform the sanctioning authority within 48 hours.

12. That mandatory setbacks as proposed shall be maintained in accordance with the provision of MPD/ layout plan.

13. That before submission of proposals, necessary information/clarification have been obtained from the concerned Planning Wing. There is no dispute/affect of any scheme or the roads widths etc. on the plot/site. Building activities for designated use, i.e. _____, are allowed as per MPD.

14. That no development /additional development /deficiency charges are dues against this plot (in case development/additional development/deficiency charges are due, the details be given in a separate para.)

15. That nothing has been concealed and no mis-representation has been made while preparing and submitting the building plans.

16. That in case anything contrary to the above id found or established at any stage, the sanctioning authority shall be at liberty to take any action as deem fit including revocation of sanction of building plans and debarring me for submission of building plans with the sanctioning authority under the Scheme and also can lodge a complaint with the Council of Architecture for appropriate action.

ARCHITECT

**UNDERTAKING – 2**

Undertaking of applicant/authorized Authority

I/We (Authorized Signatory) _____ office address_____do herby solemnly affirm and declare as under:

1. That, I/we am /are the only /owners/lessee/lessees of Plot No. _____ Block no._____ situated at _____ _____ and there are no other owner/lessees whatsoever in respect thereof.

2. That, I/We have engaged /directed Sh. _____, Registration No. _____ as an Architect for preparing the building plans and to supervise construction till its completion in respect of the aforesaid Plot.

3. That in case I/We dispense with the services of the Architect above named at any stage till actual completion of the construction, I/We shall inform the sanctioning authority within 48 hours.

4. That the plot under proposal forms part of the approved layout plan with respect to its location, size, shape and area of the plot and proposed land use is also in conformity with the approved layout plan. The plot has been demarcated at site and the size, shape and areas of plot available at site falls with the approved layout plan.

5. That the ownership documents are in shape of sale-deed/lease-deed and there is no dispute/discrepancy/from law point of view and the plot is free from all encumbrances.

6. That there is no construction is existence at the plot and no construction shall be started before sanction of the building plans.

7. That there is no encroachment on the Municipal land/road/other property and road widths as shown in the layout plan are available at site.

8 That the proposals are in conformity with the terms and conditions of lease-deed which is still operative and period of construction as per lease-deed and the extension granted by the Lessor is valid upto _____.

9. That the proposals have been prepared strictly in accordance with these Building Bye-laws, rules, regulations and practice of the Department and no misinterpretation or inference of Provisions of these Unified Building Bye-Laws, has been exercised while preparing the plans. The construction shall be carried out strictly in accordance with the sanctioned building plans and in case any deviation is carried out, I/We shall inform the sanctioning authority within 48 hours.

10. The mandatory setbacks have been proposed and shall be maintained in accordance with the setbacks marked in the layout plan /MPD.

11. That before submission of proposals, necessary information/clarification have been obtained from the concerned Planning. The plot safe and is not affected in any scheme or the roads widths. Building activities are as per approved layout plan.

12. That no development/additional development /deficiency charges are payable against this plot. (in case development/ additional development/deficiency charges are payable, then its details be given in a separate para.)

13. That no non-compoundable deviations shall be carried out during the course of construction or thereafter.

14. That nothing has been concealed and no mis-representation has been made while preparing and submitting the building plans.

15. That in case anything contrary to the above is found or established at any stage, the sanctioning authority shall be at liberty to take any action as it may deem fit including revocation of building plans and demolition/sealing of the premises.

16. That after completion of the building, the building shall not put to use before occupancy certificate from sanctioning authority and will be put to use for which it will be sanctioned.

17. That I/We give solemn undertaking that I/We shall raise the construction exactly in accordance with the sanctioned building plans and these Building Bye-Laws. In case any deviation is made, apart from any other action, the total constructions shall be deemed to be unauthorized and the sanctioning authority would be at liberty to demolish/seal the whole or any portion of the construction and I/We shall not claim any compensation, damage or loss on account thereof from the sanctioning authority or from any of its office(s). This is addition to any other action which may be taken by the sanctioning authority under the provisions of the respective Act (as amended from time to time) and these Unified Building Bye-Laws.

APPLICANT/AUTHORIZED AUTHORITY

# ANNEXURE-XIII

(See clause 3.1.2)

**Categories of Materials of storage for Warehouses as per combustion risk**

**A. Non-combustible materials:**

Articles (which are Non-Combustible, Non-Flammable, Non-Corrosive, Non-toxic, Non poisonous, Non-Explosive) such as Cement, brick, mortar, hardware items, metals in solid bar/metal goods (excluding those having melting point below 1000o C).

B. Combustible materials in following 4 sub-categories

| Category | Material Specifications | Stacking Height (in m) | |
|---|---|---|---|
| | | Medium | High |
| **Category I** | Articles such as Carpets, Non synthetic/synthetic yarn and fabrics. Mechanical and electrical goods (dominantly metal parts), Glassware and crockery, fiberboards, groceries, metal goods, Papers other than those listed under categories Moderate and High, Powdered and canned foods, Plastic/ glass bottles containing non-flammable liquids, etc. | **4** | **6.5** |
| **Category II** | Articles such as Batteries, Baled cotton/synthetic fibers, Books, Baled cork, Baled waste paper, Cartons containing alcohols ( in cans/bottles), Cartons of canned lacquers which dry by solvent evaporation, Chipboard, Cardboard rolls (horizontally Stored), Cereals/Grains/Foodstuff/ Flour/Sugar in sacks, Cellulose/Cellulose pulp, Electrical goods other than those stated in Category low, Flammable liquids in non-combustible containers, Leather goods, Palletized liquor stocks, Plastics (non-foamed, other than cellulose nitrate), Rolled pulp and paper and asphalted paper (Horizontal storage), Veneer sheets, Wooden patterns, Metal/wooden furniture with plastic seats, etc. | **3** | **5.5** |
| **Category III** | Articles such as Bitumen/Wax coated paper, Candles, Carbon black, Card board rolls (vertically stored), Charcoal, Coal> cellulose nitrate, Foamed plastic and foam rubber products, Flammable liquids in combustible containers, Linoleum products, Matches, Plastics other than those stated in Category Moderate, Rolled pulp and paper and asphalted paper (vertical storage), Rubber goods including tyres and tubes, Sawn timber, Ventilated wood stacks, Waxed and asphalt coated papers and containers in cartons, Wood wool, wooden pallets and flats (idle), Ail materials having wrappings or pre-formed containers of foamed plastics, etc. | **2** | **4.5** |
| **Category IV** | Offcuts and random pieces of foamed plastic or rubber rolls of sheets of foamed plastic or foamed rubber, Foam mattress, Expanded polystyrene packaging, Foam upholstery, etc | **1.25** | **3.5** |

**Explanations:**

| | |
|---|---|
| # The deflector of the sprinkler fitted in the ceiling shall be at more than 1.5 m from the goods stored below. However, in case of jute storage, no jute stock shall reach within 2 m of the deflectors of the sprinkler heads.<br># In case of storage in racks or shelves, if the height of storage is more than what is specified, intermediate sprinklers shall be provided for each shelf/rack in addition to the ceiling sprinklers and overall design density and AMAO shall be maintained as per Table 5 of IS: 15105.<br># The aisle width between the storage stacks shall not be less than 2.5 m and the maximum area of each storage stack shall not be more than 150m2. If these parameters are exceeded, the design density applicable shall be loaded by 2.5 L/min/m2.<br># In case of mixed storage (both moderate and high hazard storage) in buildings, the parameters will be governed by the most hazardous occupancy | Goods stored not higher than what is stated above for the appropriate category or not higher than the eaves height of the roofs or within 1 m of a flat ceiling whichever is the lowest shall be regarded as moderate hazard storage. If the above conditions are not met, the risk shall be regarded as high hazard storage |

Notes:

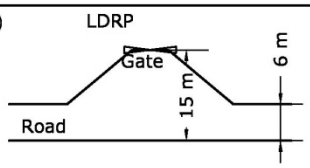
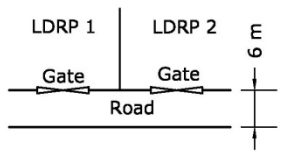
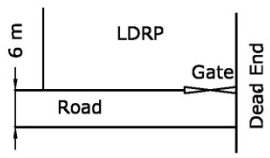
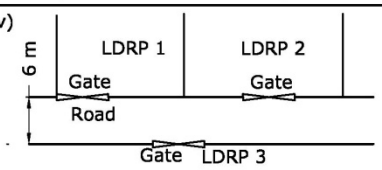
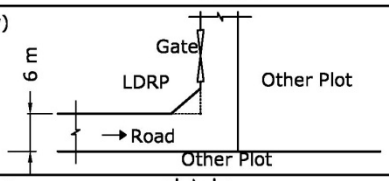
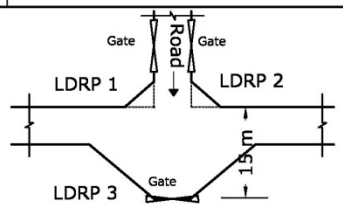
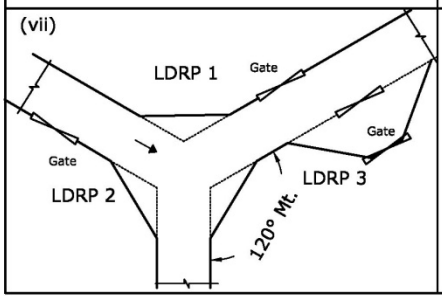
1. Any new use which increases the number of occupants to a figure comparable with other classes of occupancy shall change the classification of the building to that of the new use (for example, Warehouse used for office purposes).

2. Warehouse buildings shall not include any article which is highly combustible or explosive materials or products which are liable to bum with extreme rapidity and or which may produce poisonous fumes or explosions for storage, handling and which involve highly corrosive, toxic or noxious alkalis, acids or other liquids or chemicals producing flame, fumes and explosive, poisonous, irritant or corrosive gases; and for the storage, handling of any material producing explosive mixtures of dust which result in the division of matter in to fine particles subject to spontaneous ignition as such buildings fall in Hazardous Building Category

# ANNEXURE-XIV

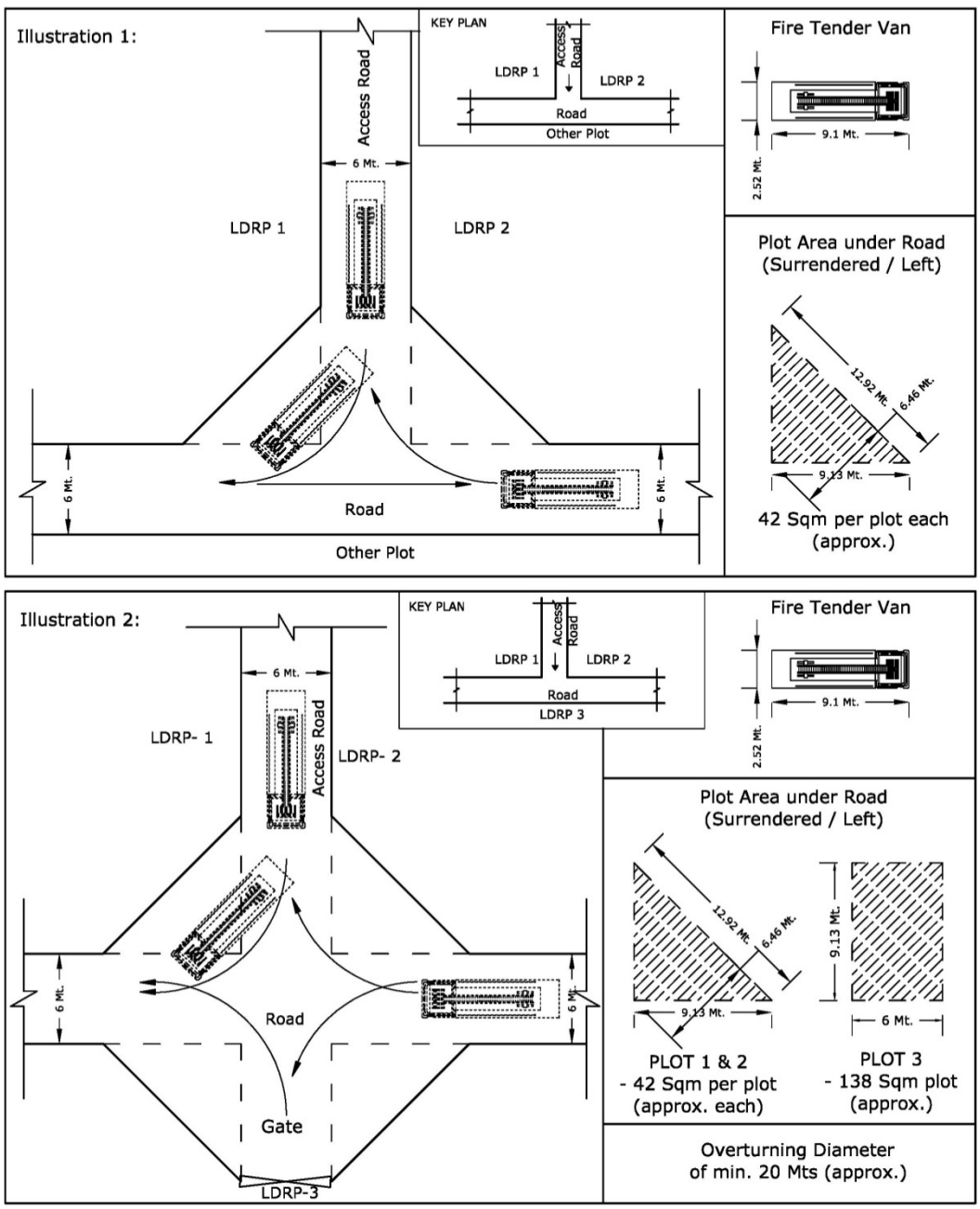
**OTHER ILLUSTRATIONS**

**[The following illustrations are not exhaustive and shall be adopted for different width of access roads (6 mts. minimum) and positioning of entrance gates of plots]**

| | |
|---|---|
| (i)   | The minimum perpendicular distance between the entrance of LDRP to the other side of the access road shall be kept as minimum 15 meters irrespective of the width of the access road (6 mtrs. min.).<br><br>[Refer Illustration 4 for design option] |
| (ii)   | Owners may adopt design as per Illustration 12 by positioning the entrance gates.<br>OR<br>In case gates are too far, they shall have to individually surrender land as per (i) above. |
| (iii)   | In case the entrance gate is near dead end of the plot sufficient width of gate (minimum 6 mtrs.) shall be maintained for enabling the emergency vehicle to move in and turn back as per Illustration 4. |
| (iv)   | Owners may opt for positioning of gates in a common space as per a design combination of Illustration 12 and (i) above.<br>OR<br>In case gates are too far they shall have to individually surrender land as per (i) above. |
| (v)   | If the owner opts for gate as in adjoining figure, minimum turning radius for fire tender to be provided in corner and gate design as per (i) above. |
| (vi)   | If the owner opt for gate as in adjoining figure, minimum turning radius for fire tender to be provided in corner and gate design as per (i) above for each gate. |
| (vii)   | If the owner opt for gate as in adjoining figure, minimum turning radius for fire tender to be provided in corner and gate design as per (i) above for each gate. |

## Proposed Road Geometrics for Low Density Residential Plot with 6 metres ROW

**[These illustrations are not exhaustive and are based on 6 mts. corner radius for kerb for residentail areas which is the minimum radius as per *Street Design Guidelines of UTTIPEC, 2010* . The following illustrations are based on the road width of 6 mtrs. minimum and in case of plots facing the road having width more than 6 mtrs. the land required to be surrendered may vary or reduce proportionately as per road geometrics. In case any other configurations not covered in the Illustrations (1-12) given below, the same principles of clear fire tender movement shall apply (Annexure 4.0 (IV))]**



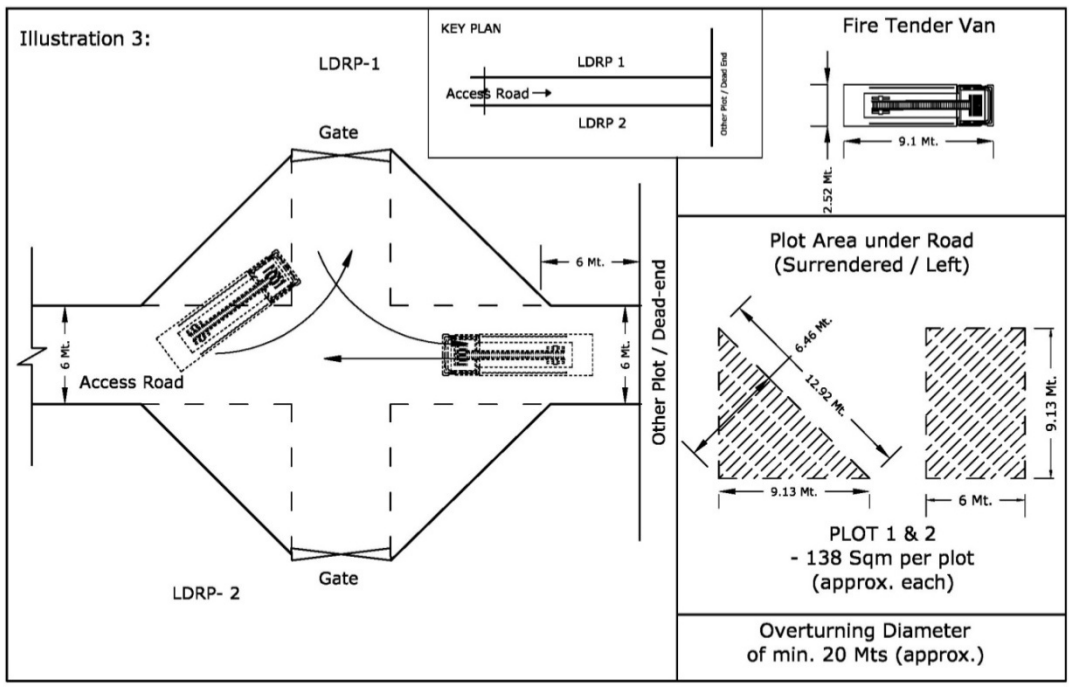


Illustration 3:
LDRP-1
Gate
KEY PLAN
LDRP 1
Access Road
LDRP 2
Other Plot / Dead-end
Fire Tender Van
9.1 Mt.
2.52 Mt.
6 Mt.
6 Mt.
Access Road
6 Mt.
Other Plot / Dead-end
Plot Area under Road
(Surrendered / Left)
6.46 Mt.
12.92 Mt.
9.13 Mt.
9.13 Mt.
6 Mt.
PLOT 1 & 2
- 138 Sqm per plot
(approx. each)
Gate
LDRP- 2
Overturning Diameter
of min. 20 Mts (approx.)

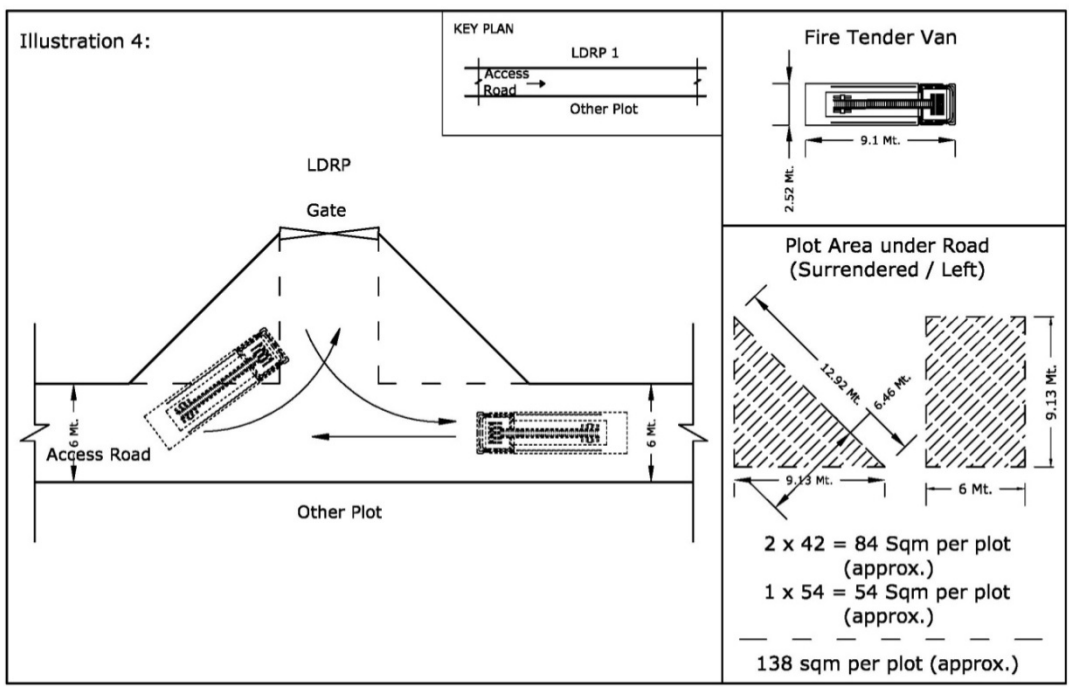


Illustration 4:
KEY PLAN
LDRP 1
Access Road
Other Plot
Fire Tender Van
9.1 Mt.
2.52 Mt.
LDRP
Gate
Plot Area under Road
(Surrendered / Left)
12.92 Mt.
6.46 Mt.
9.13 Mt.
9.13 Mt.
6 Mt.
6 Mt.
Access Road
6 Mt.
Other Plot
2 x 42 = 84 Sqm per plot
(approx.)
1 x 54 = 54 Sqm per plot
(approx.)
138 sqm per plot (approx.)

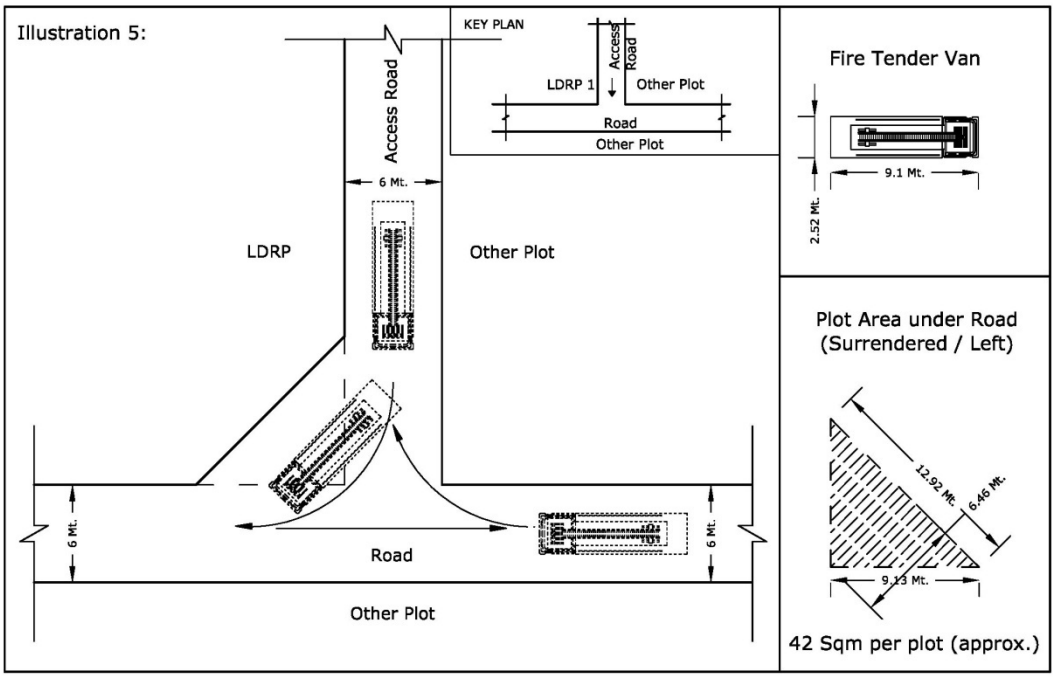


Illustration 5:
KEY PLAN
Access Road
LDRP 1
Other Plot
Road
Other Plot
Access Road
6 Mt.
LDRP
Other Plot
6 Mt.
Road
6 Mt.
Other Plot
Fire Tender Van
9.1 Mt.
2.52 Mt.
Plot Area under Road
(Surrendered / Left)
12.92 Mt.
6.46 Mt.
9.13 Mt.
42 Sqm per plot (approx.)

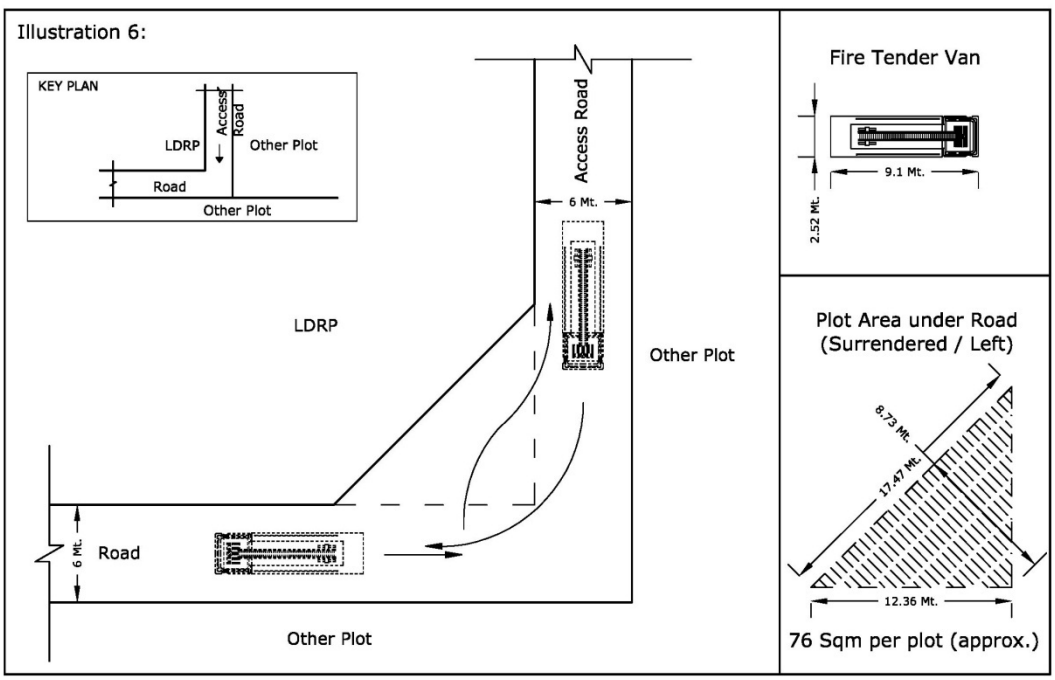


Illustration 6:
KEY PLAN
LDRP
Access Road
Other Plot
Road
Other Plot
Access Road
6 Mt.
LDRP
Other Plot
6 Mt.
Road
Other Plot
Fire Tender Van
9.1 Mt.
2.52 Mt.
Plot Area under Road
(Surrendered / Left)
8.73 Mt.
17.47 Mt.
12.36 Mt.
76 Sqm per plot (approx.)

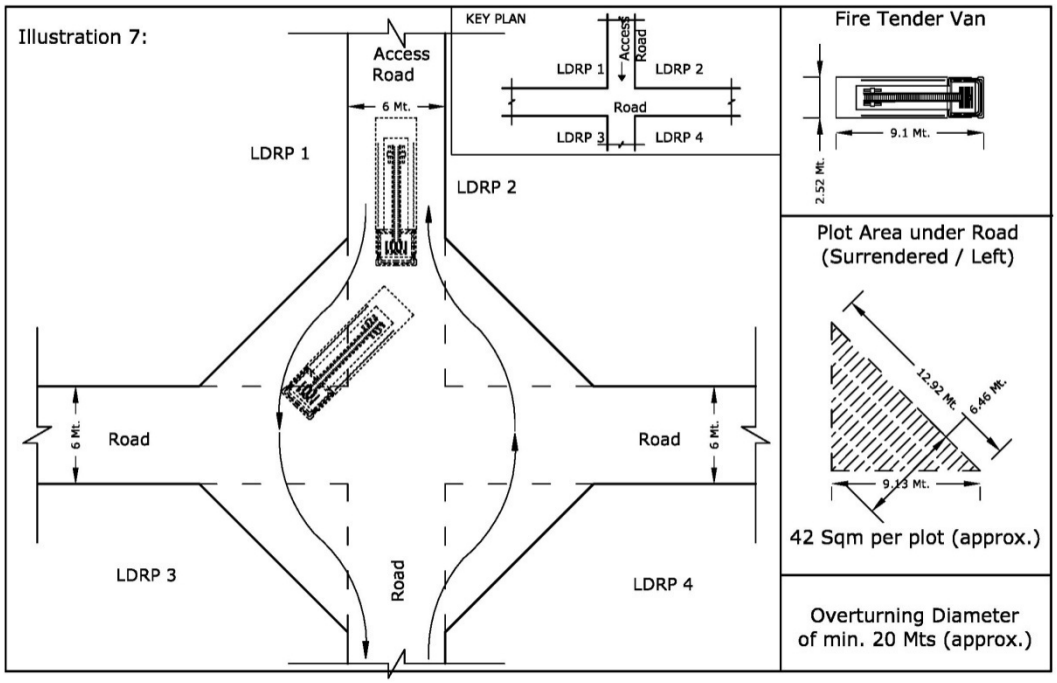


Illustration 7:
Access Road
6 Mt.
LDRP 1
LDRP 2
LDRP 3
LDRP 4
Road
6 Mt.
KEY PLAN
Access Road
LDRP 1
LDRP 2
Road
LDRP 3
LDRP 4
Fire Tender Van
9.1 Mt.
2.52 Mt.
Plot Area under Road (Surrendered / Left)
12.92 Mt.
6.46 Mt.
9.13 Mt.
42 Sqm per plot (approx.)
Overturning Diameter of min. 20 Mts (approx.)

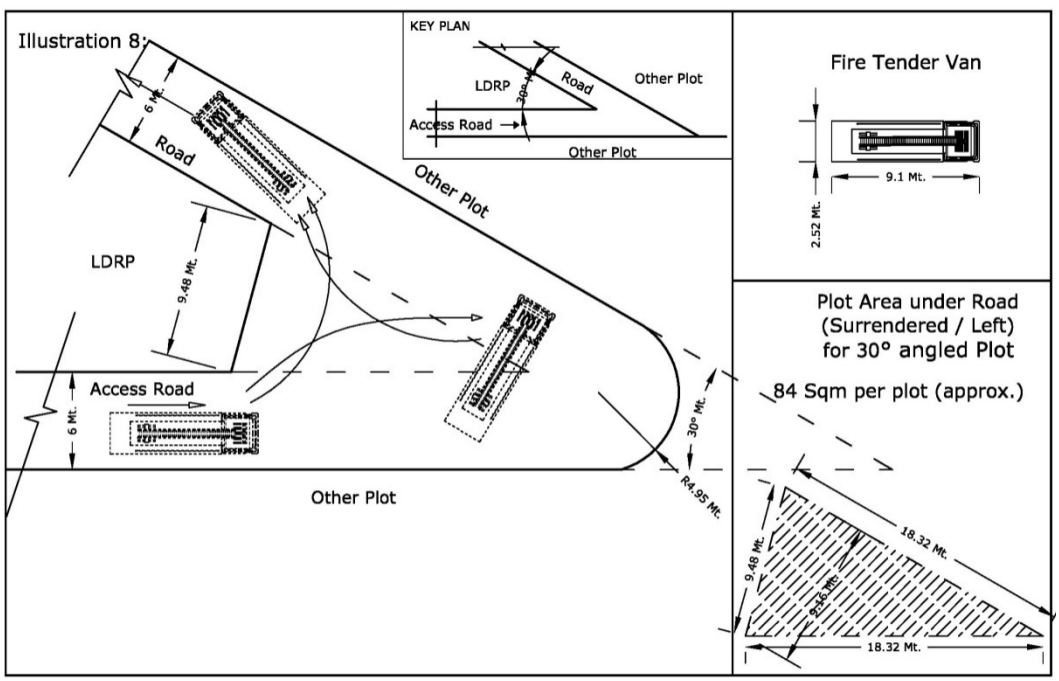


Illustration 8:
KEY PLAN
LDRP
30° Mt.
Road
Other Plot
Access Road
Other Plot
Fire Tender Van
9.1 Mt.
2.52 Mt.
Road
6 Mt.
LDRP
9.48 Mt.
Access Road
6 Mt.
Other Plot
30° Mt.
R4.95 Mt.
Plot Area under Road (Surrendered / Left) for 30° angled Plot
84 Sqm per plot (approx.)
9.48 Mt.
18.32 Mt.
9.48 Mt.
18.32 Mt.

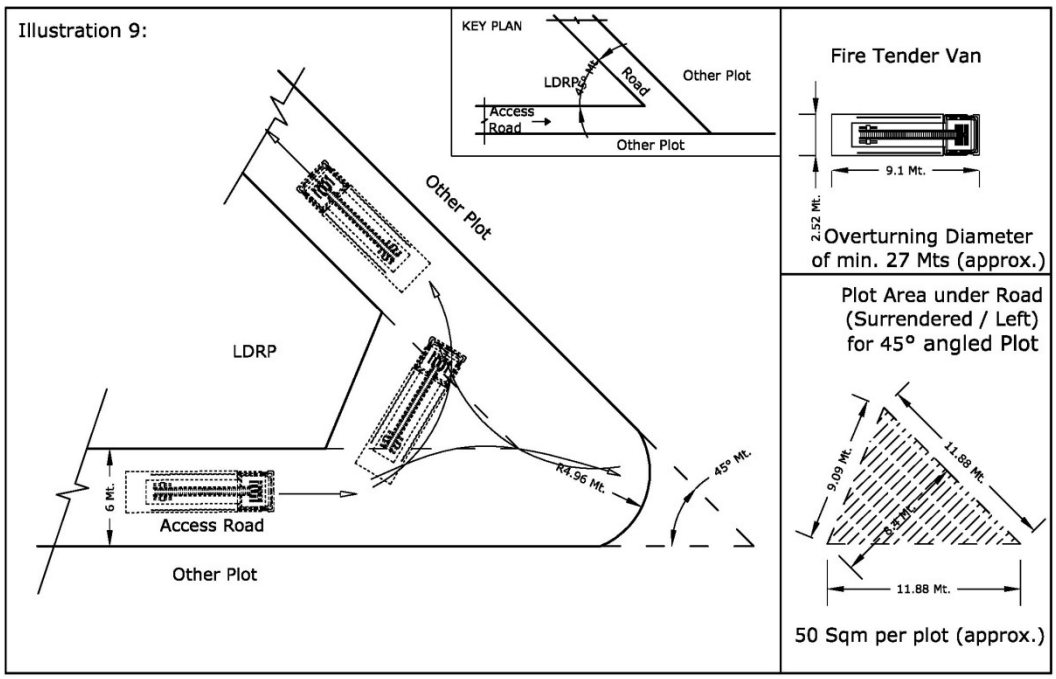


Illustration 9:
KEY PLAN
LDRP
Road
Other Plot
Access Road
Other Plot
Other Plot
LDRP
6 Mt.
Access Road
Other Plot
R4.96 Mt.
45° Mt.
Fire Tender Van
9.1 Mt.
2.52 Mt.
Overturning Diameter of min. 27 Mts (approx.)
Plot Area under Road (Surrendered / Left) for 45° angled Plot
9.09 Mt.
11.88 Mt.
11.88 Mt.
50 Sqm per plot (approx.)

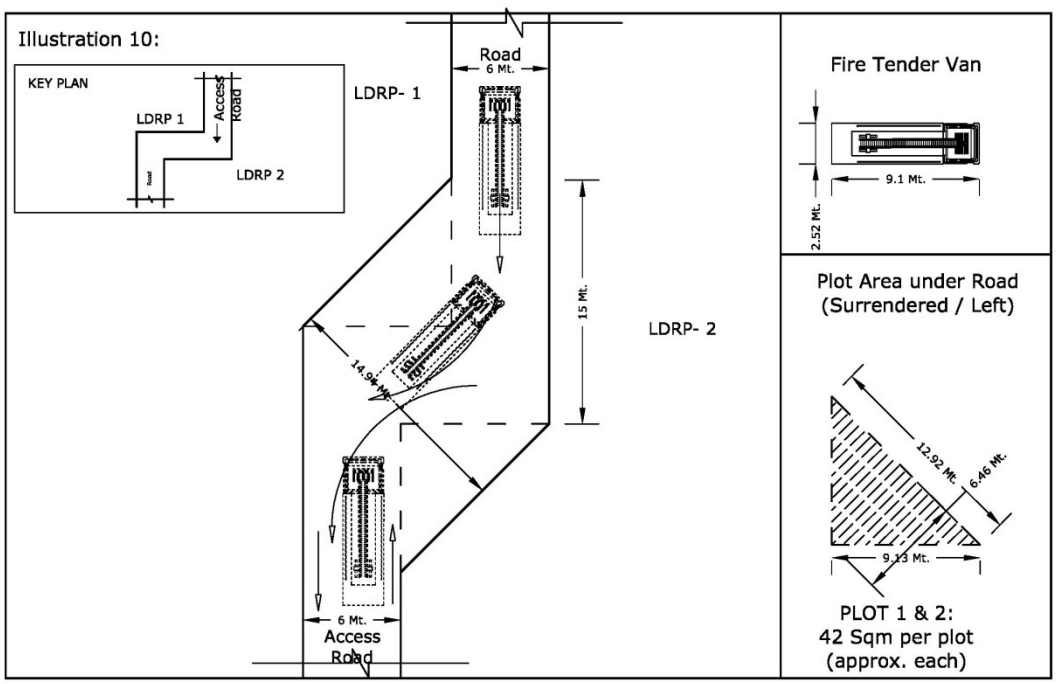


Illustration 10:
KEY PLAN
LDRP 1
Access Road
LDRP 2
Road
6 Mt.
LDRP- 1
15 Mt.
LDRP- 2
14.94 Mt.
6 Mt.
Access Road
Fire Tender Van
9.1 Mt.
2.52 Mt.
Plot Area under Road (Surrendered / Left)
12.92 Mt.
6.46 Mt.
9.13 Mt.
PLOT 1 & 2:
42 Sqm per plot
(approx. each)

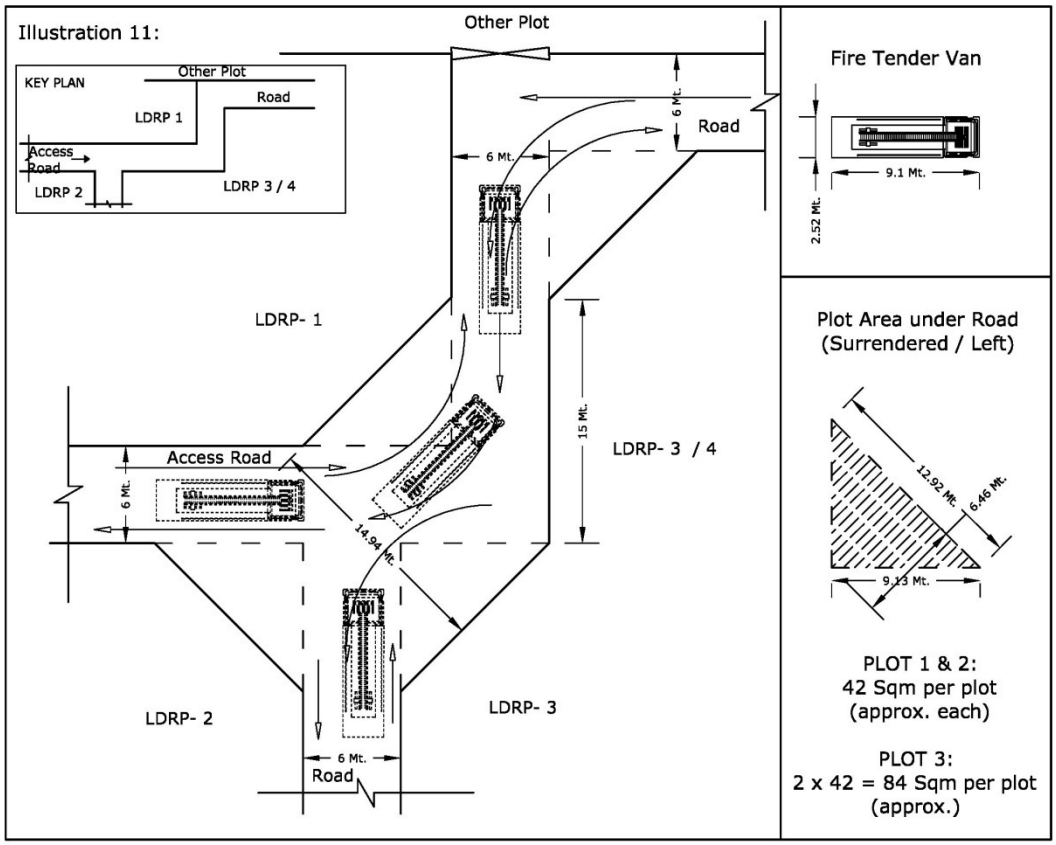


Illustration 11:
Other Plot
KEY PLAN
Other Plot
Road
LDRP 1
Access Road
LDRP 2
LDRP 3 / 4
6 Mt.
Road
6 Mt.
LDRP- 1
15 Mt.
LDRP- 3 / 4
Access Road
6 Mt.
14.94 Mt.
LDRP- 2
LDRP- 3
6 Mt.
Road
Fire Tender Van
9.1 Mt.
2.52 Mt.
Plot Area under Road
(Surrendered / Left)
12.92 Mt.
6.46 Mt.
9.13 Mt.
PLOT 1 & 2:
42 Sqm per plot
(approx. each)
PLOT 3:
2 x 42 = 84 Sqm per plot
(approx.)

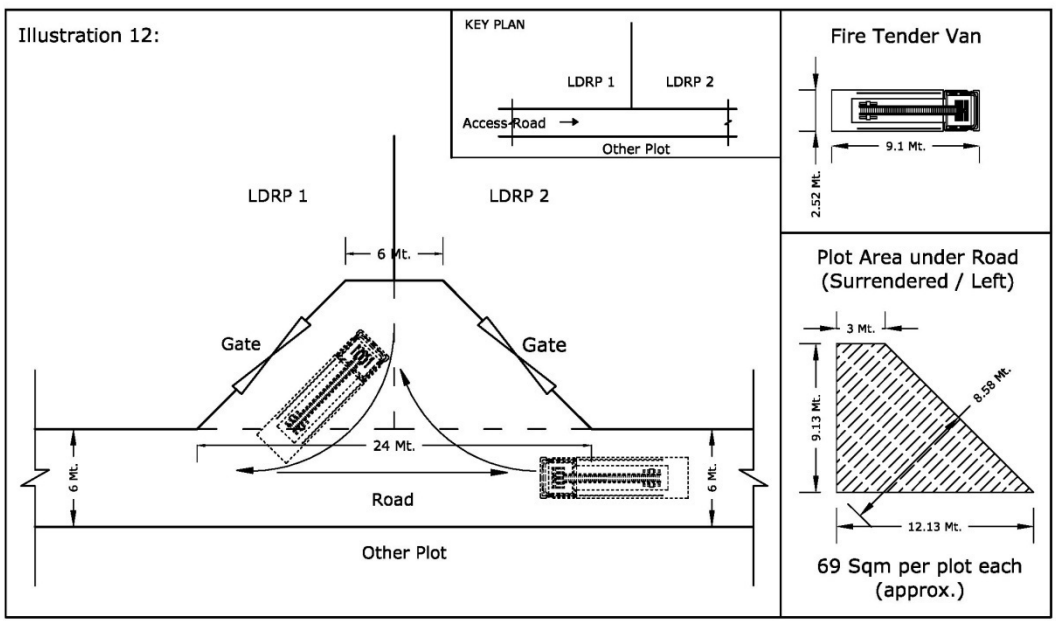


Illustration 12:
KEY PLAN
LDRP 1
LDRP 2
Access Road
Other Plot
LDRP 1
LDRP 2
6 Mt.
Gate
Gate
24 Mt.
6 Mt.
6 Mt.
Road
Other Plot
Fire Tender Van
9.1 Mt.
2.52 Mt.
Plot Area under Road
(Surrendered / Left)
3 Mt.
8.58 Mt.
9.13 Mt.
12.13 Mt.
69 Sqm per plot each
(approx.)

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