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OFFICE OF THE
IMPHAL MUNICIPAL CORPORATION

NOTIFICATION

Imphal, the 12th March 2019

No. IMC/E/529/2010: In accordance with provisions under Section 211(1) and 212 of Manipur Municipalities Act, 1994, it is notified for information of general public that Imphal Municipal Corporation proposes to amend the existing Imphal Municipal Council Building Bye-Laws 2013 as "The Imphal Municipal Council Building Bye-laws (First Amendment), 2019" as confirmed by government vide letter No. 2/17/2018 –MAHUD dated 11th March 2019.

Any objection(s)/suggestion(s) to the proposed amendment may be submitted so as to reach the Municipal Commissioner, Imphal Municipal Corporation within 15 days from the date of publication of this Notification in the Official Gazette. Objection/suggestion received after the aforesaid period shall not be entertained.

Copies of the aforesaid "The Imphal Municipal Council Building Bye-laws (First Amendment), 2019" shall be available for inspection in the office of the undersigned from 11 A.M. to 3 P.M. on all working days.

By order & in the name of Corporation

K. CHANDRAKUMAR SINGH
Municipal Commissioner,
Imphal Municipal Corporation.

The Imphal Municipal Council Building Bye-laws (First Amendment), 2019

1. Short title and commencement:

1) This Bye-law may be called the Imphal Municipal Corporation Building Bye-laws (First Amendment), 2019.
2) It extends to the whole of the Imphal Municipal Corporation Area.
3) It shall come into force on such date as the State Government may, by notification in the official Gazette, appoint.

2. Amendment of section 1:

Section 1(1) of the Imphal Municipal Council Building By-laws, 2013 (hereinafter referred to as Principal Law) may be substituted by Imphal Municipal Corporation Building Bye-laws, 2019.

3. Amendment of section 2:

1) After sub-section (1) of section 2 of the Principal Law, the following sub-sections (1a), (1b), (1c) and (1d) shall be inserted, namely:

(1a) "Access" – A clear approach to a plot or a building.

(1b) "Act" – The Act of the Local Body / Authority concerned.

(1c) "Addition and Alteration" - A change from one occupancy to another or a structural change including an addition to the area or change in height or the removal of part of building or any change to the structure such as the construction or removal or cutting into any wall or part of wall, partition, column, beam, joist, floor including a mezzanine floor or other support or a change to or closing of any required means of access ingress or a change to fixtures or equipment as provided in these Bye Laws.

(1d) "Air Conditioning" - The process of treating air so as to control simultaneously its temperature, humidity, purity, distribution and air movement and pressure to meet the requirements of the conditioned space.

2) After sub-section (2) of section 2 of the Principal Law, the following sub-section (2a) shall be inserted, namely:

(2a) "Amenity" - Includes roads, street, open spaces, parks, recreational grounds, play grounds, gardens, water supply, electric supply, street lighting, sewerage, drainage, public works and other utilities, services and conveniences.

3) After sub-section (3) of section 2 of the Principal Law, the following sub-sections (3a), (3b), (3b(i)), (3c) and (3d) shall be inserted, namely:

(3a) "Application" - An application made in such form as may be prescribed by the Authority from time to time.

(3b) "Architect" - A person holding a graduate degree in Bachelor of Architecture from any institute recognized by the Council of Architecture (COA) and has his/her name entered in the register of COA for the time being, with a valid COA Registration number. (Please see Appendix E - Qualification and competence of Technical Personnel for preparation of Schemes for Building Permit and supervision.)

3(b)(i) "Architect/Professional on Record" - An Architect/Competent professional who is brought on record to represent his/her client for construction project to act on their behalf regarding building permits and process of construction (as detailed at Section and competence given as per Appendix E). "Antenna" means any structure or device used to receive or transmit electromagnetic waves including both directional antennas such as panels, microwave dishes and Omni directional antennas such as whips but not the satellite earth stations. This definition does not include any structure erected solely for residential or non commercial individual use such as television antenna, satellite dishes etc.

3(c) "Area" - In relation to a building means the superficies of a horizontal section thereof made at the plinth level inclusive of the external walls and of such portions of the party walls as belong to the building.

3(d) "Authority" – The Authority which has been created by a statute and which for the purpose of administering the Code/Part may authorize a committee or an official or an agency to act on its behalf herein after called the "Authority". Authority can be any Urban Local Body /Urban Development Authority/Industrial Development Authority or any other Authority as notified by the State Government as the case may be.

4) After sub section (5) of section 2 of the Principal Law the following sub-sections (5a) and (5b) shall be inserted, namely:

5(a) *"*Balcony" - A horizontal projection, cantilevered or otherwise including a parapet, handrail, balustrade to serve as passage or sit out place.

5(b) "Barsati" – A habitable room/rooms on the roof of the building with or without toilet/kitchen.

5) Subsection 8 of section 2 of the Principal Law shall be deleted.

6) Subsection 9 of section 2 of the Principal Law shall be substituted, namely:

(9) "Building" – A structure constructed with any materials whatsoever for any purposes whether used for human habitation or not and includes:-

i. Foundation, Plinth, walls, floors, roofs, chimneys, plumbing and building services, fixed platforms etc.
ii. Verandahs, Balconies, cornices, projections etc.
iii. Parts of buildings or anything affixed thereto;
iv. Any wall enclosing or intended to enclose any land or space, sign and outdoor display structures; etc.
v. Tanks constructed or fixed for storage of chemicals or chemicals in liquid form and for storage of water, effluent, swimming pools, ponds etc.
vi. All types of buildings as defined in (a) to (q) below, except tents, shamianas and tarpaulin shelters erected temporarily for temporary purposes and ceremonial occasions shall be considered to be buildings.

(9A) Types of buildings based on use of premises or activity:

a) "Residential Building" – includes a building in which sleeping and living accommodation is provided for normal residential purposes with cooking facilities and includes one or more family dwellings , apartment houses, flats and private garages of such buildings.

b) "Educational Building" – includes a building exclusively used for a school or college, recognized by the Appropriate Board or University or any other competent Authority involving assembly for instruction, education or recreation incidental to educational use and including a building for such other uses as research institution, it shall also include quarters for essential staff required to reside in the premises and building used as a hostel captive to an educational institution whether situated is its campus or outside.

c) "Institutional Buildings" – includes a building constructed by Government , Semi Government Organizations or Registered Trusts and used for medical or other treatment or for an auditorium or complex for cultural and allied activities or for an hospice, care of persons suffering from physical or mental illness, handicap, disease or infirmity, care of orphans, abandoned women, children and infants, convalescents, destitute or aged persons and for penal or correctional detention with restricted liberty of the inmates ordinarily providing sleeping accommodation and includes dharamshalas, hospitals, sanatoria, custodial and penal institutions such as

jails, prisons, mental hospitals, houses of correction, detention, and reformatories etc.

d) "Assembly Building" - A building or part thereof , where groups of people (not < 50) congregate or gather for amusement, recreation , social, religious, patriotic , civil, travel and similar purposes and this includes buildings of drama and cinemas, theatres, drive in theatres, assembly halls, city halls, town halls, auditoria, exhibition halls, museums, mangalkaryalayas, skating rinks, gymnasia, restaurants, eating or boarding houses, places of worship, dance halls, clubs, gymkhanas, and road, railways, air, sea, or other public transportation stations and recreation piers.

e) "Business Building" - includes any building or part thereof used principally for transaction of business and or keeping of accounts and records including offices, banks, professional establishments, court houses etc, if their principal function is transaction of business and or keeping of books and records.

f) "Mercantile Building" – includes a building or part thereof used as shops, stores or markets for display and sale of whole sale, and or retail goods, or merchandise, including office, storage, and service facilities incidental thereto and located in the same building.

g) "Industrial Building" - includes a building or p*art thereof wherein products or material re-fabricated, assembled, or processed such* as assembly plants, laboratories, power plants, refineries, gas plants, mills, dairies, and factories. etc.

h) "Storage Building" – A building or part thereof used primarily for storage or shelter of goods, wares, merchandise, and includes a building used as a warehouse, cold storage, freight depot, transit shed, store house, public garage, hanger, truck terminal, grain elevator, barn and stables.

i) "Hazardous Building" – includes a building or part thereof used for:-

   i. Storage, handling, manufacture of processing of radioactive substances or highly combustible or explosive materials or of products which are liable to burn with extreme rapidity and /or producing poisonous fumes or explosive emanations.
   ii. Storage, handling, manufacture or processing of which involves highly corrosive , toxic or noxious alkalis, acids, or other liquids, gases or chemicals, producing flame, fumes, and explosive mixtures etc. Or which result in division of matter into fine particles capable of spontaneous ignition

j) "Mixed Land Use Building" - A building partly used for non-residential activities and partly for residential purpose.

k) "Wholesale establishment" - An establishment wholly or [partly engaged in whole sale trade and manufacture, wholesale outlets, including related storage facilities, warehouses and establishments engaged in truck transport including truck transport booking agencies.

(9B) Types of buildings based on design and height:

a) "Detached Building"- includes a building with walls and roofs independent of any other building and with open spaces on all sides within the same plot.
b) "Multi- Storied Building or High Rise Building"- A building above 4 storeys and/or a building exceeding 15 meters or more in height (without stilt and 17.5 m (including stilt).
c) " Semi – Detached Building"- A building detached on three sides with open space as specified in these regulations:

(9C) Types of Buildings based on other features:

a) "Special Building"- includes all buildings like assembly, industrial, buildings used for wholesale establishment, hotels, hostels, hazardous, mixed occupancies with any of the aforesaid occupancies and centrally air conditioned buildings having total built up area exceeding 500 sqm.
b) "Multi level car parking" – A building partly below ground level having two or more basements or above ground level primarily to be used for parking of cars, scooters or any other type of light motorized vehicle.

(9D) Types of Buildings based on safety due to use/maintenance level:

a) "Slum" – Buildings that are in poor condition of maintenance or have compromised habitability due to poor ventilation, sanitation or otherwise are termed slums. These are generally declared or notified as slums under relevant legislation by competent authority.

b) "Unsafe Building" – Includes a building which:
i. Is structurally unsafe, or
ii. Is insanitary, or
iii. Is not provided with adequate means of ingress or egress or
iv. Constitutes a fire hazard or
v. Is dangerous to human life or
vi. In relation to its existing use, constitutes a hazard to safety or health or public welfare by maintenance, dilapidation or abandonment.

Note: All unsafe buildings are required to be restored by repairs, demolition or dealt with as directed by the Authority. The relevant provisions of the Act shall apply for procedure to be followed by the Authority in taking action against such buildings.

(9E) "Building Envelope"- The horizontal spatial limits up to which a building may be permitted to be constructed on a plot.

(9F) "Building Height"- The vertical distance measured

i) In the case of flat roofs from the average level of the front door and continuance to the highest point of the building.
ii) In the case of pitched roofs up to the point where the external surface of the outer wall intersects the finished surface of the sloping roof and
iii) In the case of gables facing the road midpoint between the eaves level and the ridge.

Architectural features serving no other function except that of decoration shall be excluded for the purpose of measuring heights. The height of the building shall be taken up to the terrace level for the purpose of fire safety requirements.

7) After sub-section (10) of section 2 of the Principal Law the following sub-sections (10a),(10b) and (10c) shall be inserted, namely:

(10a) "Cabin"- A non residential enclosures constructed of non-load bearing partitions.

(10b) "Canopy"- shall mean a cantilevered projection from the face of the wall over an entry to the building at the lintel or the slab level provided that

i) It shall not project beyond the plot line.
ii) It shall not be lowered than 2.3 m or 7'6" when measured from the ground.
iii) There shall be no structure on it the top shall remain open to sky.

(10c) "Carpet Area"- The covered area of the usable rooms of a dwelling Unit at any floor (excluding the area of the walls)

8) Subsection (13) of section 2 of the Principal Law shall be deleted.
9) After subsection (14) of section 2 of the Principal Law the following sub-sections (14a), (14b), (14c) shall be inserted, namely:

(14a) "Cornice" – means a sloping or horizontal structural overhang usually provided over openings or external walls to provide protection from sun and rain.

(14b) "Corporation 'means Imphal Municipal Corporation. Every word of Council reflected in the bye-law shall be substituted by Corporation.

(14c) "Courtyard"- A space permanently open to sky, enclosed fully or partially by buildings and may be at ground level or any other level within or adjacent to a building.

10) After sub-section (16) of section 2 of the Principal Law the following sub-sections (16a) and (16b) and (16c)shall be inserted, namely:

(16a) "Damp proof Course"- A course consisting of some appropriate water proofing material provided to prevent penetration of dampness or moisture.

(16b) "Density"- The residential density expressed in terms of the number of dwelling units per hectare.

(16c) "Development"- Development with grammatical variations means the carrying out of building, engineering, mining or other operations in or over or under land or water, on the making of any material change, in any building or land, or in the use of any building, land and includes re-development and layout and sub- division of any land "to develop" shall be construed accordingly.

11) After sub-section (19) of section 2 of the Principal Law the following sub-sections (19a), (19b), (19c),(19d) and (19e) shall be inserted, namely:

(19a) "Empanelled Architect" – A person empanelled by the Authority as per rules under the bye laws as an authorised person to sanction building plans of residential buildings up to 15 m height and for plot sizes up to 500 sqm forming part of any approved layout plan.

(19b) "Enclosed Staircase" - means a staircase separated by fire resistant walls and doors from rest of the building

(19c) "Encroachment" – means an act to enter into the possession of rights either of permanent or temporary nature on a land or built up property of local body or State/Central Government

(19d) "Existing Building" - A building or structure existing authorised with the approval of the Authority before the commencement of these Bye–Laws.

(19e) "Existing Use"- Use of a building or structure existing authorised with the approval of the Authority before the commencement of these Bye –Laws.

12) Subsection(20) of section 2 of the Principal Law shall be substituted by, namely:

(20) "Exit" means a passage or means of egress from any building storey or floor area to a street or other open space of safety.

i. Horizontal exit means an exit which is protected opening through or around a fire well or bridge connecting two or more buildings.
ii. Outside exit mean a exit used from building to an open area leading to a public way or to an enclosed fire resistant passage leading to public way.
iii. Vertical; exit means an exit used for ascending or descending between two or more levels including stairway, fire towers, ramps and fire escapes.

13) After subsection(20) of section 2 of the Principal Law the following sub-sections (20a), (20b), (20c), (20d), (20e), (20f), (20g), (20h), (20i), (20j), (20k), (20l), (20m), (20n), (20o), (20p), (20q), (20r), (20s) and (20t) shall be inserted, namely:

(20a) "External wall" – An outer wall of a building not being a party wall even though adjoining to a wall of another building and also means a wall abutting on an interior open space of any building.

(20b) "Floor"- The lower surface in a storey on which one normally walks in a building and does not include a mezzanine floor. The floor at Ground level with direct access to a street or open space shall be called the ground floor, the floor above it shall be termed as floor – 1 with the next higher floor being as floor – 2 and so on upwards.

(20c) "Floor Area Ratio" - The quotient obtained by dividing the combined covered area (plinth area) of all floors excepting areas specifically exempted under these regulations, by the total area of the plot viz.:

$$\textbf{Floor Area Ratio} = \frac{\textbf{total covered area on all floors}}{\textbf{Plot Area}}$$

(20d) "Fire and Emergency Alarm System" Fire Alarm system comprises of components for manually or automatically detecting a fire, initiating an alarm of fire and initiating other actions as appropriate.

(20e) "Fire Hazard Industries"

i. "Low fire Hazard industries" includes engineering industries using/processing or assembling non-combustible materials i.e. lathe machines, steel works, steel components.
ii. "Moderate Fire Hazard industries" includes industries using/processing combustible materials but not flammable liquid etc., plastic industries, rubber, and PVC Industries, textile , paper, furniture, flour mills etc.
iii. "High Fire Hazard industries" includes industries using/processing flammable liquids, gases, chemicals petroleum products, plastic or thermo setting group etc.

(20f) "Fire Lift" means a special lift designed for the use of fire service personnel in the event of fire or other emergency.

(20g) "Fire Proof Door" Means a door or shutter fitted to a wall opening and constructed and erected with the requirement to check the transmission of heat and fire for a period.

(20h) "Fire Pump" Means a machine , driven by external power for transmitting energy to fluids by coupling the pump to a suitable engine or motor which may have varying outputs/capacity but shall be capable of having a pressure of 3.2 kg/cmsq. at the topmost level of multi storey or high rise building.

(20i) "Fire Resistance" –Fire Resistance is a property of an element of building construction and is the measure of its ability to satisfy for a stated period some or all of the following criteria:

a. Resistance to collapse
b. Resistance to penetration of flame and hot gases and
c. Resistance to temperature rise on the unexposed face up to a maximum of 180 degree Celsius and /or average temperature of 150 degree Celsius.

(20j) "Fire Resistance Rating" The time that a material or construction will withstand the standard fire exposure as determined by fire test done in accordance with the standard methods of fire tests of materials/structures.

(20k) "Fire Separation"- Means the distance in meters measured from any other building on the site or from another site or from the opposite side of a street or other public space to the building.

(20l) "Fire Resistance Building" means a building in which material which has appropriate degree of fire resistance is used.

(20m) "Footing"- A foundation unit constructed in brickwork, stone masonry or concrete under the base of a wall or column for the purpose of distributing the load over a larger area.

(20n) "Foundation" – A substructure supporting an arrangement of columns or walls in a row or rows transmitting the loads to the soil.

(20o) "Gallery" An intermediate floor or platform projecting from a wall of an auditorium or a hall providing extra floor area, and additional seating accommodation and includes the structure provided for seating in stadia.

(20p) "Garage –Private" – A building or a portion thereof, designed and used for the parking of vehicle.

(20q) "Garage- Public" –A building or portion thereof , designed other than as a private garage , operated for gain designed and used for

repairing, servicing, using, selling or storing or parking motor driven and other vehicles.

(20r) "Ground Floor"- shall mean storey which has its floor surface nearest to the ground around the building.

(20s) "Group Housing"- means a building unit constructed or to be constructed with one or more floors having more than two dwelling units having common service facilities where land is owned jointly (as in the case of co-operative societies or the public agencies such as local authorities or housing boards etc) and the construction is undertaken by one Agency.

(20t) "Habitable Room"- A room occupied or designed for occupancy by one or more persons for study, living, sleeping, eating, kitchen if it is used as living room, but not including bathrooms, water–closet compartments, laundries, serving and store pantries, corridors, cellars, attics, and spaces that are not used frequently or during extended periods.

14) After sub-section (21) of section 2 of the Principal Law the following sub-sections (21a) and (21b) shall be inserted, namely:

(21a) "Illuminated Exit Signs"- A device for indicating the means of escape during normal circumstances and power failure.

(21b) "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 hectare.

15) After sub-section (23) of section 2 of the Principal Law the following sub-sections (23a) and (23b) (23c), (23d), (23e), (23f), (23g), (23h) and (23i) shall be inserted, namely:

(23a) "Lift" - An appliance designed to transport persons or materials between two or more levels in a vertical or substantially vertical direction by means of a guided car or platform. The word "elevator" is also used synonymously for "lift".

(23b) "Lobby" - means a covered space in which all the adjoining rooms open.

(23c) "Loft" – An intermediate floor between two floors or a residual space in a pitched roof above normal level constructed for storage with maximum clear height of 1.5 metres.

(23d) "Masonry" - An assemblage of masonry units properly bound together by mortar.

(23e) "Masonry Unit" –A unit whose net cross sectional area in every Plane parallel to the bearing surface is 75%or more of its gross cross – sectional area measured in the same plane. It may be either of clay, brick, stone, concrete, sand lime brick or any other construction material.

(23f) "Master Plan"- A master plan formulated under any relevant Act (Town and Country Planning or Development Act or Municipal Act) for any town, approved and notified by the State Government

(23g) "Mayor" means Mayor of the Imphal Municipal Corporation.

(23h) "Means of Escape" - An escape route provided in a building for safe evacuation of occupants.

(23i) "Mezzanine Floor" – An intermediate floor between two floors of any storey forming an integral part of floor below.

16) After sub-section (24) of section 2 of the Principal Law the following sub-sections (24a) and (24b) (24c), (24d), (24e), (24f), (24g), (24h), (24i),(24j) and (24k) shall be inserted, namely:

(24a) "Mumty or stair cover"- A structure with a covering roof over a staircase and its landing built to enclose only the stairs for the purpose of providing protection from weather and not used for human habitation.

(24b) "Non–Combustible material"- A material which is not liable to burn or add heat to a fire when tested for combustibility in accordance with the latest code of Bureau of Indian Standards Method of Test for combustibility of Building Materials.

(24c) "Occupancy or Use"- The principal Occupancy/use for which a building or a part of a building is intended to be used. For the purposes of classification of a building according to occupancy, an occupancy shall be deemed to include the subsidiary occupancies which are contingent upon it.

(24d) "Mixed Occupancy"- buildings being those in which more than one occupancy is present in different portions of the buildings.

(24e) "Open Space"- An area forming an integral part of a site left open to the sky.

(24f) "Owner"- Person or body having a legal interest in land and/or building thereon. This includes free holders, leaseholders or those holding a sub – lease which both bestows a legal right to occupation and gives rise to liabilities in respect of safety or building condition.

In case of lease or sub-lease holders, as far as ownership with respect to the structure is concerned, the structure of a flat or structure on a plot belongs to the allottee/lessee till the allotment / lease subsists.

(24g) "Parapet"- A low wall or railing built along the edge of a roof or a floor.

(24h) "Parking space"- An enclosed or unenclosed covered or open area sufficient in size to park vehicles. Parking spaces shall be served by a driveway connecting them with a street or alley and permitting ingress and egress of vehicles.

(24i) "Partition" - An interior non local bearing barrier, one storey or part storey in height.

(24j) "Partition wall includes"

i. 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 of adjoining buildings belonging to different owners or constructed or adopted to be occupied by different persons; or
ii. A 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 or ground of different owners.

(24k) "Permanent Open Air Space"- Air space permanently open:

i. If it is street
ii. If its freedom from encroachment is protected by any law or contract ensuring that the ground below it is either a street or is permanently and irrevocably appropriated as an open space.

17) Subsection (25) of section 2 of the Principal Law shall be deleted.

18) After sub-section (26) of section 2 of the Principal Law the following sub-sections (26a) and (26b) (26c), (26d), (26e), (26f) and (26g) shall be inserted, namely:

(26a) "Permission or permit" – A valid permission or authorization in writing by the competent Authority to carry out development or a work regulated by the Bye –Laws.

(26b) "Plinth" - The portion of a structure between the surface of the surrounding ground and surface of the floor immediately above the ground.

(26c) "Plinth Area" - The built up covered area measured at the floor level of the basement or of any storey.

(26d) "Plotted development"–Type of development layout wherein a stretch of developed land is divided into regular sized plots for uniform controlled building volumes.

(26e) "Porch"- A covered surface supported on pillars or otherwise for the purpose of a pedestrian or vehicular approach to a building.

(26f) “Prohibited Area” - means any area specified or declared to be a prohibited area under section 20A of the AMASR (Ancient Monuments Archaeological Sites and Remains Act) Act, 2010.

(26g) “Protected Monument” - means an ancient monument which is declared to be of national importance by or under the AMASR Act, 2010.

19) After sub-section (27) of section 2 of the Principal Law the following sub-section (27a) shall be inserted, namely,

(27a) “Regulated area” means any area specified or declared under section 20B under the AMASR Act, 2010.

20) After sub-section (28) of section 2 of the Principal Law the following sub-sections (28a), (28b), (28c), (28d), (28e) and (28f) shall be inserted, namely,

(28a) “Road Street”- Any Highway, street, lane, pathway, alley, stairway, passageway, carriageway, footway, square, place, or bridge whether a thorough - fare or over which the public have a right of passage or access or have passed and have access uninterruptedly for specified period, whether existing or proposed in any scheme and includes all bends, channels, ditches, storm water drains, culverts and railing within the street lines.

(28b) ”Road street level or grade”-The whole extent of space within the boundaries of a road when applied to a new road/street as laid down in the city survey or development plan or prescribed road lines by any act of law and measured at right angles to the course or intended course of direction of such road.

(28c) “Road/Street Line” The line defining the side limits of a road/street.

(28d) “Road width or Width of Road/street”- The whole extent of space within the boundaries of a road when applied to a new road/street as laid down in the city survey or development plan or prescribed road lines by any Act of Law and measured at right angles to the course or intended course of direction of such road.

(28e) “Row Housing”- A row of houses with only one front, rear and interior open spaces.

(28f) “Room Height”- The vertical distance measured from the finished floor surface to the finished ceiling surface. Where a finished ceiling surface is not provided, the underside of the joists or beams or tie beams shall determine the upper point of measurement for determining the head room.

21) After sub-section (29) of section 2 of the Principal Law the following sub-sections (29a), (29b), (29c), (29d), (29e), (29f) and (29g) shall be inserted, namely,

(29a) "Service Road" A road/lane provided at the front, rear or side of a plot for service purpose.

(29b) "Site"- See Plot.

(29c) "Site Corner" – A site at the junction of and fronting on two or more intersecting roads or streets.

(29d) "Site Depth" - The mean horizontal distance between the front and rear site boundaries.

(29e) "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.

(29f) "Site with double frontage"- A site having frontage on two streets other than cornerplot.

(29g) "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.

22) After sub-section (30) of section 2 of the Principal Law the following sub-section (30a), shall be inserted, namely,

(30a) "Settlement"- A human settlement whether urban or rural in character. It includes habited villages, towns, townships, cities and the areas notified under the control of the Authority

23) After sub-section (31) of section 2 of the Principal Law the following sub-sections (31a), (31b) and (31c) shall be inserted, namely:

(31a) "Spiral Staircase"- A staircase forming continuous winding curve round a central point or axis provided in an open space having tread without risers.

(31b) "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.

(31c) "To abut" To be positioned juxtaposed to a road, lane, open space, park, building etc.

24) After sub-section (34) of section 2 of the Principal Law the following sub-sections (34a), (34b), (34c), (34d), (34e), (34f) and (34g) shall be inserted, namely:

(34a) "Un-authorised construction" - means the erection or re erection, addition or alterations which is not approved or sanctioned by the Authority.

(34b) "Underground/Overhead Tank" - An installation constructed or placed for storage of water.

(34c) "Ventilation" - Supply of outside air into, or the removal of inside air from an enclosed space.

a. Natural Ventilation-Supply of outside air into a building through window or other openings due to wind outside and convection effects arising from temperature or vapour pressure differences (or both) between inside and outside of the building.
b. Positive Ventilation- The supply of outside air by means of a mechanical device such as a fan.
c. Mechanical Ventilation- Supply of outside air either by positive ventilation or by infiltration by reduction of pressure inside due to exhaust of air, or by a combination of positive ventilation and exhaust of air.

(34d) "Verandah"- A covered area with at least one side open to the outside with the exception of 1m high parapet on the upper floors to be provided on the open side.

(34e) "Water Closet (W.C)"- A water flushed plumbing fixture designed to receive human excrement directly from the user of the fixture. The term is used sometimes to designate the room or compartment in which the fixture is placed.

(34f) "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 means of egress/ingress.

(34g) "Zonal Plan"- A plan detailing out the proposals of Master Plan and the layout Plan. It may contain a site Plan and land use plan with approximate location and extent of land uses such as public & semi – public buildings/works, utilities, roads, housing, recreation, industry, business, markets, schools, hospitals, open spaces etc. It may also specify standards of population density and various components of development of the zone.

4. **Deletion of section 24.**
Section 24 of the Principal Law shall be deleted.

5. Deletion of section 44.
Section 44 of the Principal Law shall be deleted.

6. Deletion of section 45.
Section 45 of the Principal Law shall be deleted.

7. Deletion of section 47.
Section 47 of the Principal Law shall be deleted.

8. Deletion of section 51.
Section 51 of the Principal Law shall be deleted.

9. Amendment of section 54 of Chapter VI of the Principal Law.
After section (54) the following sub-sections (54a), (54b), (54c) (54d), (54e), (54f), (54g), (54h), (54i) shall be inserted, namely:

54(a) Segregated sanitation for visitors in Public Buildings

54(b) Special requirement of segregated sanitation for Visitors in Public buildings, Government Buildings, Hospitals, Educational Institutions, Commercial buildings etc. Provisions and occupancy shall be referred at Table 54.1 Public toilets are meant for floating population, usually located near railway stations, bus stands, market places, government hospitals, religious centres etc.

54(c) The preferable location of these toilets shall be within 200-500 metres from the main entry of the building.

54(d) The site shall be earmarked on site plan or a layout plan.

54(e) It must be accessible to visitors and general public during the operational hours of the building. However fiscal generation for maintenance may be planned w.r.t. user charges from visitors and general public.

54(f) Other factors to be considered.

a. Waste water conveyance/treatment and prevention of contamination. Location on site should allow easy and hygienic emptying of the pits/tanks and ensure that ground water table is not contaminated by waste water percolation.
b. Adequacy in provision.
c. Design consideration.
   i. Adequate ventilation
   ii. Door Design/ Direction of swing of the door (preferred outwards
   iii. Adequate waiting area and
   iv. Adequate volumes of water storage.

54(g) The facilities should include

i. Separate toilet blocks for men and women with separate entries.
ii. Seats for children to be provided in both sections for men and women.
iii. Waiting and holding area.
iv. Space for facility caretaker and maintenance staff- from where they can monitor and maintain both facilities for men and women.
v. Urinal facilities for men.
vi. Waste water disposal system
vii. Janitor/store room for cleaning material and equipments.

54(h) Norms for differently baled within segregated toilets.

i. One special W.C. in a set of toilet shall be provided for the use of differently abled persons with essential provisions of wash basins near the entrance.
ii. Minimum clear opening of the door shall be 900 mm and the door shall swing out.
iii. Suitable arrangement for vertical and horizontal handrails with 50 mm clearance from wall shall be made in the toilet. The W.C. seat shall be 500 mm from the floor.

54 (i) Water requirement and facilities.

Water requirement to be kept for enough storage for ½ day operation either in underground sump or overhead tank. Alternatively a hand tube well can be used for storing water. To minimise the wastage of water, self closing water taps should be used. The pans must be pouring flush with a steep design. Traps should be of 20 mm water seal. If toilet is to be linked to city sewer, a master trap has to be provided at sewer connection.

Table 54.1 Segregated sanitation facilities for visitors in Public Buildings.

No.	Sanitary Unit	For Male Personnel	For Female personnel
1.	Public toilet near Railway stations (24x7) (a) Water Closet (W.C) (b) Urinals (c) Ablution taps	 (a) One for 100 users (b) One unit per 300-500 users (c) One in each W.C	 (a) One for 50 users (b) -------- (c) One in each W.C
2.	Public Toilet near market place/offices (for working hours) (a) Water Closet (b) Urinal (c) Ablution Taps	 (a) One for 100 users (b) One unit per 200-300 users (c) One in each W.C	 (a) One for 50 users (b) ---------- (c) One in each W.C
3.	Public toilets near Public Buildings (a) Water closet (b) Urinals (c) Ablution taps	 (a) One for 100 users (b) One unit per 200 – 300 users (c) One in each W.C.	 (a) One for 50 users (b) ---------- (c) One in each W.C

The recommended areas for different facilities at Visitors toilets.

No.	Sanitary Unit	Dwelling with individual convenience	Dwelling without individual convenience
1.	Bath Room	One provided with water tap	One for every two tenement
2.	Water Closet	One	One for every two tenement
3.	Sink	One	
4.	Water Tap		One with drainage Arrangement in each tenement One in common bath room and common water closet.

10. Insertion of a new Chapter VIA:

After Chapter VI of the Principal Law, the following new Chapter VIA shall be inserted, namely –

CHAPTER VIA

PROVISION FOR HIGH RISE DEVELOPMENT

54A. High Rise

Buildings higher than 15 m of height without stilts and above 17.5 m of height with stilts shall be considered as high rise buildings.

54B Plot area

Plots to be used for high rise development in an approved layout Plan, Comprehensive plan or sub division as prepared and approved by competent authority.

54C Means of Access

a. A building shall be on a street or upon spaces directly connected from the street by a hard surface approach road; width of approach road is not less than 9 metres.
b. If there is any bend or curve on the approach road a sufficient width shall be provided at the curve to enable the fire appliances to turn, the turning circle being at least of 9.0 m radius.
c. The approach road to the building and open spaces on all its sides up to 6 m width and layout for the same shall be done with consultation with the Chief fire officer. The said open space shall be kept free from any obstruction and shall be motor able.

d. Main entrance to the premises shall be adequate width to allow easy access to the fire engine and in no case it shall measure less than 6 m. The entrance gate shall fold back against the compound wall of the premises. If archway is provided, the height of the archway shall not be less than 5 m.

e. For multi-storeyed group housing schemes on one plot, the width of approach road to the site shall be of minimum 18m width.

54D FAR, SETBACKS AND HEIGHTS OF RESIDENTIAL BUILDINGS

Proposed setbacks and heights of residential buildings.								
No	**Plot Area (sq.mt.)**	**FAR**	**Maximum Height (in metres)**		**Setbacks proposed (in meters)**			
					Front	**Rear**	**Side 1**	**Side 2**
1	90 - 150	180	11	G+2	1.50	0.90	0.90	0.90
2	150 - 300	180	11	G+2	2.00	1.20	1.20	1.20
3	300 - 500	180	13	G+3	3.00	2.00	1.80	1.20
4	500 - 750	200	13	G+3	4.00	3.00	2.40	1.20
5	750 -1000	200	16	G+4	5.00	4.50	4.20	2.50
Above 16 MTS								
6	1000-1500	250	19	G+5	6.00	4.50	4.50	3.00
7	1500 -2000	250	22	G+6	7.00	4.50	4.50	3.50
8	2000 -2500	250	25	G+7	8.00	4.50	4.50	4.00

54E Parking spaces.

a. The parking space shall be provided as per the provisions of the Master Plan or Zonal Plan.

b. In case of High Rise building parking will be permitted at any or all of the following
   i. Basement
   ii. Stilts
   iii. Podium.

c. Stacked /Multilevel/Automated parking is also permitted.

54F Building Components.

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 access.
   b. No exit doorway shall be less than 1m in width. Doorways shall be not less than 0.75 m wide.
   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 of stairs, a landing equal to at least the width of the door shall be

provided in the stairway in each doorway, level of landing shall be the same as that of the floor which it serves.

e. Exit doorways shall be opening able 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.

2 Revolving doors

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

3 Stairways.

a. A staircase shall be arranged round 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 of 0.5 sqm. 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 1m above the surrounding roof, glazing or glass bricks if used in staircase shall have fire resistance rating of minimum 2 hour.
c. The minimum width of staircase shall be as given below:

Table 54F.3 Minimum width of staircase for different types of buildings

Type of building	width
Residential building(dwellings)	1.0 m
Residential hotel buildings	1.5 m
Assembly buildings like auditorium, theatre, cinemas.	2.0 m
Educational buildings up to 30m in height	1.5 m
Institutional buildings like hospitals	2.0 m
All other buildings	1.5 m

d. The minimum width of treads without nosing shall be 0.25 m for staircase for residential building. In case of other buildings the minimum tread shall be 0.3 m. The treads shall be constructed and maintained in a manner to prevent slipping. The maximum height of riser shall be 0.19 m in the case of residential building and 0.15 m in the case of other buildings and shall be limited to 15 risers per flight.
e. Handrails shall be provided with a minimum height of 0.9 m from the centre of the tread
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 resistance rating. Automatic closing door placed in the

enclosing walls of the staircases. It shall be swing type door opening in the direction of the escape.

h. No living space , store or other for risk shall open directly to the open space, store or other fire risk shall open directly to the open spaces or can be reached without passing through any door other than a door provided to form a drought lobby.

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 drought lobby.

j. The exit sign with arrow indicating the way to the escape route shall be provided at a height of 0.5 m from the floor level on the wall and shall be illuminated by electric light connected to corridor circuits. All exit way making signs shall be flushed with the wall and so designed that no mechanical damage shall occur to them due to moving of furniture or other heavy equipments. Further all landing of floors 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 0.5 mx0.5 m and it shall be prominently on the wall facing the staircase.

k. In case of single staircase it shall terminate at the ground floor and 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 by either a ventilated lobby with discharge points at two different ends or through enclosures with fire resistance rating door or through a fire protected corridor.

4. Lifts

General requirements of the lifts

a. All the floors shall be accessible for 24 hours by the lift.
b. Grounding switch 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 2 hour. Lifts shall have vent at the top of area not less than 0.2 sq m
e. Lift car door shall have a fire resistance rating of 1 hour.
f. Lift lobby doors in lift enclosures shall have fire resistance as per section11.7.1 of chapter 11.
g. Collapsible gates shall not be permitted for lifts and shall have solid doors with fire resistance of at least 1 hr.
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 appositive pressure of 50 pa shall be maintained in the lift shaft. The mechanism for pressurization shall act automatically with a fire alarm. It shall be possible to operate this mechanically also.

i. Lifts communicating with the basement, the lift lobby of the basements shall be pressurized as suggested in Clause 11.9.1 (g) and 11.9.1 (h) with self closing door with fire resistance rating (refer section 11.7.1 of chapter 11). 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. Suitable arrangements such as providing slope in the floor of lift lobby shall be made to prevent water used during fire fighting 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 location of stairways. Alternate source of power supply shall be provided for all the lifts through a manually operated change over switch.

m. For pressurization specifications for various building components refer chapter 4 of NBC and lift safety clause 4.10.

5. Basements

a. Basements shall be permitted within the setback lines subject to clearance from the local bodies/departments concerned, Municipal Corporation and Fire Departments. Where there are no setbacks, it should be after leaving required 6 m from plot boundary (as per development control rules of Master Plan)

b. Each basement shall be separately ventilated. Vents with cross sectional area 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 may 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 or near the opening.

c. The staircase of basement shall be of enclosed type having fire resistance rating. 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 given below shall be followed. If travel distance exceeds that given in the table below, additional staircases may be provided.

Table 54F.5 Travel distance for occupancy and type of construction

No	Group of occupancy	Maximum travel distance construction	
		Type 1 & 2	Type 3&4
i	Residential (A)	30.0	22.5
ii.	Educational (B)	30.0	22.5
ii.	Institutional	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 &4 not permitted
viii.	Storage(H)	30.0	Construction Type 3 &4 not permitted
ix.	Hazardous(J)	22.5	Construction Type 3 &4 not permitted

Notes:

1. For fully sprinkled building, the travel distance may be increased by 50% of the values specified above.
2. Ramps shall be counted as one of means of escape wherever permitted in National Building Code 2005.

e. In multi story basement intake ducts may serve all basement levels but each basement level and basement compartments shall have separate smoke outlet doctor 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 automatically.

g. Mechanical extractors shall have an internal locking arrangement, so that extractors shall continue to operate and supply fans for HVAC shall stop automatically with the actuation of fire detectors.

h. Mechanical extractors shall be designated to permit 30 air changes as per hour 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 2005.

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 when this 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 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 provision of the Indian electricity Act/Rules. Boiler Room shall be provided at the first basement along the periphery wall with fire resistance rating or shall be separated with the blast wall.

l. If cut outs are provided from basements to the upper floors or to the atmospheres, all sides cut out 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 and 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 for smoke from floor to floor.

6. Compartmentation

The building should 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. Compartmentalization and pressurization method shall be adopted as per clause 4.10 of Para 4 of NBC 2005.

7. Ramps

a. The ramps to basement and parking floors shall be not less than 7.2 m wide for two way traffic and 4 m wide for one way traffic provided with gradient 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. Ramps 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 safety and design aspects as per latest BIS Code and NBC, 2005 shall be complied along with consideration of weight of fire engine and in no case the gradient shall be less than 1;10

d. The minimum width of ramps in hospitals shall be 2.4 m for stretcher and not for vehicular movement.

e. In this case Handrails shall be provided on both sides of the ramp.

f. Ramps shall lead directly to outside open space at ground level or courtyards or safe place.

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. The minimum width of a corridor in a residential building shall be 1.0.m for single loaded and 1.8 m for double loaded and in all other buildings shall be 1.5 m.

c. Where stairways discharge through corridors and passageways, the height of corridors and passageways shall be not less than 2.4

d. All means of exit including staircases lifts lobbies and corridors shall be ventilated.

9. Glass facades/service ducts/Shafts/Refuge area/vents

a. An opening to the glass facade of min 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.

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 facade shall be of toughened (tempered) safety glass as per I.S.2553

e. To avoid Fire propagation vertically from one floor to another floor, a continuous glass must be separated internally by a smoker fire seal which is of non combustible material having a fire resistance rating of not less than 2 hours.

f. Service ducts and shafts shall be enclosed by walls and doors with fire resistance rating. All such ducts and shafts shall be properly sealed and stopped fire ingress at all floor levels.

g. A vent opening at the top of the service shall be provided having an area between one fourth and one half of the area of the shaft.

h. The openable vent of minimum 2.5% of the floor area shall be provided. The open able 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.

1. Alternate vertical glass panels of the facade shall be open able type with the mechanism mentioned above in order to ventilate the smoke.
2. Refuge areas covered with the glass facade shall have all the panels fully open able (either left or right hinged (both from inside as well as outside).

Glass quality practice of use of glass in buildings shall have to be in conformity with the BIS Codes.

54G BUILDING SERVICES.

1. Staircase and corridor lighting

a. The staircase and corridor lighting shall be on separate service and shall be independently connected so as it could be operated by one switch installation on the ground floor, easily accessible to fire fighting 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 properly.

2. Electrical services

a. The electrical distribution cables/wiring shall be laid in separate duct the duct shall be sealed at every floor with non combustible materials having the same for 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 cables, intercom cables, 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. The provision of dedicated telecommunication ducts for all new building proposals is mandatory for conveyance of telecommunication and other data cables.

d. Separate circuits for water pump lifts, staircases and corridor lighting and blowers for pressurizing system shall be provided directly from the main switchgear panel refer NBC 2005.

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.

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 sufficient gauge metal in accordance with good practice.
c. Where ever 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. Where duct crosses a compartment which is fire rated, the ducts shall be fire rated for same fire rating. Further depending on services passing around the duct work, which may get affected in case of the temperature rising, the ducts shall be insulated.
e. Metallic ducts shall be used even for the return air passage 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 enclosures.
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. If the air unit handling serves more than one floor, the recommendations given above shall be complied with an 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 masonry construction.

iv. The air filters of the air handling units shall be of non combustible materials or fire rated.

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 150 mm to any duct unless such duct is enclosed and protected spy glass with neoprene facing enclosed and wrapped with aluminium sheeting) at least 3.2 mm thick and would not readily conduct heat.

5. Transformers

a. If the transformers shall be dry type and shall be kept in an enclosure with walls, doors and cut outs having fire resistance rating of 4 hour. The entrance to the room shall be provided with a steel door of fire rating of 2 hours. A curb of suitable height should be provided at the entrance in order to prevent the flow of oil from ruptured transformer into other parts of the basement. The switchgear should be housed in a separate room with fire resistance not less than 4 hours.

b. The transformer shall be protected by an automatic foam sprinkler system. If they are housed on the ground floor they should be cut off from the other portion of the premises by fire resistant walls of 4 hours rating.

c. A tank of R.C.C 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.

d. The electric sub-station shall be located in a separate building in accordance I.E Rules 68(I) and 64 (I)(a).

e. If this is not possible due to site conditions, the sub-stations shall be located on the ground floor. As far as possible due to site conditions the sub-station shall not be installed in a basement, for such situations special provisions like mechanical ventilation, wherever required, cable ducting, cable trays, top/bottom entry of HV/LV cable, hooks on Transformers and HV Panels, adequate fire detection and fire fighting arrangement, adequate drainage, effective measures to prevent flooding etc. shall be provided. Adequate precautions shall also be taken for water proofing to prevent seepage of water. A ramp shall also be provided with a slope, not steeper than 1 in 7, for easy movement of equipments to and from sub – station.

f. Fire regulation- The installations shall be carried out in conformity with the local regulations and rules there under wherever they are in force. At other places NBC *Guidelines shall be followed.*

6. General

a. Architectural elements such as louvers, pergolas other sunshine materials should be free from FAR

b. Followings are also permitted out of FAR if not used for habitable or commercial purposes.

c. Building elements such as sky bridges and landscapes terraces which are meant for community purposes only shall be permitted free of FAR.

d. Services can be permitted on roofs with adequate screening for the same.

e. Service floor.

f. Atrium /Atria at any floor will be counted only once in the FAR. Atrium may be enclosed by light roofing or R.C.C.

g. Scissor staircase will be permitted provided all travel distance and fire norms are adhered to.

h. Stilts in high rise will not be restricted to height of 2.4 m as long as it is used for parking.

i. Multilevel car parking with car lifts would be permitted with adequate fire safety.

11. Amendment of Section 55

In Section 55 of the Principal Law the following shall be substituted, namely

i. In sub- section 2(b) of Section 55 the year 1984 shall be substituted by the year 2007.

ii. In sub-section 2(h) of Section 55 the year 1966 shall be substituted by the year 1994.

iii. In sub-section 2(k) of Section 55 the year 1979 shall be substituted by the year 2010.

iv. In sub-section 4(c) of Section 55 the year 1993 shall be substituted by the year 2013.

v. In sub-section 4(f) of Section 55 the year 1993 shall be substituted by the year 2009.

12. Insertion of a new Chapter XII:

After Chapter XI of the Principal Law, the following new Chapter XII shall be inserted, namely

CHAPTER XII

GREEN BUILDINGS AND SUSTAINABILITY PROVISIONS

76. All buildings on various plot sizes above 100 sq m shall comply with the green norms and conform to the requirements mandatory for sanction as mentioned in this chapter.

1. Provisions for applicability

The green building provisions on various plinth sizes are indicated in the table below Provisions and applicability for various plot sizes (Residential and non residential)

Table 76.1 Provisions and applicability for various plot sizes (Residential and non-Residential)

Plot Category	Applicable plot area	Provisions for residential	Provisions for non residential
I	Up to 100	Nil	Nil
	100 to 500	1. Installation of solar photovoltaic Panel 2. Installation of solar assisted Water heating system 3. Segregation of Waste	1. Installation of solar photovoltaic Panel 2. Installation of solar assisted Water heating system 3. Segregation of Waste
	500 to 1000	1. Installation of solar assisted Water heating system 2. Lighting of common areas by solar energy / LED Devices. 3. Segregation of Waste	1. Installation of solar assisted Water heating system 2. Lighting of common areas by solar energy / LED Devices. 3. Segregation of Waste
	1000 to 3000	1. Installation of solar photovoltaic Panel	1. Installation of solar photovoltaic Panel

		2. Installation of solar assisted Water heating system 3. Energy efficiency in HVAC Systems 4. Lighting of common areas by solar energy / LED Devices. 5. Segregation of Waste	2. Installation of solar assisted Water heating system 3. Energy efficiency in HVAC Systems 4. Lighting of common areas by solar energy / LED Devices. 5. Segregation of Waste
III	Above 3000	1. Low water consumption plumbing fixtures 2. Installation of solar photovoltaic Panel 3. Installation of solar assisted Water heating system 4. Low energy consumption lighting fixtures (Electrical appliance 5. Energy efficiency in HVAC Systems 6. Lighting of common areas by solar energy / LED Devices. 7. Segregation of Waste 8. Organic Waste management.	1. Low water consumption plumbing fixtures 2. Installation of solar photovoltaic Panel 3. Installation of solar assisted Water heating system 4. Low energy consumption lighting fixtures (Electrical appliance 5. Energy efficiency in HVAC Systems 6. Lighting of common areas by solar energy / LED Devices. 7. Segregation of Waste 8. Organic Waste management.

2. Roof top solar energy installation

Rooftop photovoltaic power station or rooftop PV System, in a photovoltaic system that has its electricity generating solar panels mounted on the rooftop of residential or commercial buildings. The various components of such a system include photovoltaic modules, mounting systems, cables, solar inverters and other electrical accessories. Rooftop PV Systems are faster than other types of renewable power plants. They are clean, quiet and visually unobtrusive.

Table 76.2 Norms for Roof top Solar PV installation and generation.

No.	Category of Building/area	Area standards	Generation requirement
		Residential	
1.	Plotted Housing	For HIG Plots above	Minimum 5% of connected load or 20 w/sqft for available roof space, whichever is less.
2.	Group Housing	All proposals as per Group Housing Norm	Minimum 5% of connected load or 20 w/sqft. for available roof space, whichever is less.

All other buildings mandatory for buildings having shadow free rooftop area > 50 sqm.			
1 2. 3. 4. 5. 6.	Educational Institutional Commercial Industrial Mercantile Recreational	Plot size of 500 sqm. and above	Minimum 5% of connected load 20w/sqft. for available roof space whichever is less.

3. Installation of solar assisted water heating systems in buildings

No new building in the following categories in which there is a system of installation for supplying hot water shall be built unless the system of the installation is also having an auxiliary solar assisted water heating system.

a. Hospitals and Nursing homes.

b. Hotels, lodges, guest houses, Group housing with a plot area of 4000sqm.

c. Hostels of Schools, Colleges, and training Centres with more than 100 students.

d. Barracks of armed forces, paramilitary forces and police.

e. Individual residential buildings having more than 150 sqm. Plinth area.

f. Functional buildings of railway stations and airports like waiting rooms, retiring rooms, rest rooms, inspection bungalows and catering units.

g. Community Centres, Banquet halls, baratghars, Mangalkaryalayas and buildings for similar use.

II. Definitions

I	"Solar assisted water heating system"	A device to heat wate5r by using solar energy as heat source.
II	"Auxillary backup"	Electrically operated or fuel fired boilers/systems to heat water coming out from solar water heating system to meet continuous requirement of hot water.
III	"New Building"	Such buildings of above said categories for which construction plans have been submitted to the Authority for clearance.
IV	"Existing building"	Such buildings which are licensed to perform their respective business.

III. Installation of solar water heating system

a. New buildings: Clearance of plan for the construction of new buildings of the aforesaid categories shall only be given if they have a provision in the building design itself for an insulated pipeline from the rooftop to the building to various distribution points where hot water is required. The building must have a provision for continuous water supply to the solar water heating system. The building should also have open space on the rooftop which receives direct sunlight. The load bearing capacity of the roof should at least be 50 kg /per sqm. All new buildings of above said categories must complete installation of solar water heating systems before obtaining necessary licence to commence their business.
b. Existing buildings: Installation Of solar assisted Water heating Systems in the Existing Building shall be made mandatory at the time of change of use to above said category provided there is a system or installation for supplying hot water.

IV. Capacity:

The capacity of solar water heating system to be installed on the building of different categories shall be decided in consultation with the local bodies. The recommended minimum capacity shall not be less than 25 litres per day for each bathroom and kitchen subject to the condition that maximum of 50% of the total roof area is provided with the system.

V. Specifications:

Installation of Solar Assisted Water Heating Systems shall conform to BIS specification IS 12933. The solar collectors used in the system shall have the BIS Certification mark.

VI. Auxiliary System:

Wherever hot water requirement is continuous, auxiliary heating arrangement either with electric elements or oil of adequate capacity can be provided.

4. Sustainable Waste management

Zero waste is a concept of waste management and planning approaches that emphasize waste prevention as opposed to end waste management. This means restructuring production and distribution systems, designing and managing products and processes to systematically follow the three R S Rules of Reduce, Reuse and Recycle the volume of waste to conserve and recover all used resources and therefore eliminating all discharges to landfills and prevent air water and land pollution. Zero Waste and land fill can be achieved by adopting systematic approach of segregation at source by planning, by collection facilitation and most importantly creating public awareness. The green waste can be converted into fuel cakes, kitchen waste into manure, construction and demolition

waste into bricks, plastic waste into oil, paper, glass and steel back into the same and all residual inert materials can also be converted into bricks. Achieving Zero landfills more conveniently possible, if

a. The collection is made from house to house and some segregation is done at household level and
b. Separate wet and dry bins must be provided at the ground level
c. The recycling is done at decentralized say at ward or even lower level.

77. Various Guidelines for Green Rating Systems

The respective State Government may prepare their separate Green Rating System for buildings selectively combining/ adopting/ amending the provisions between the following Guidelines.

1. IGBC guidelines by the confederation of Indian Industries.

2. GRIHA guidelines by the Ministry of New and Renewable Energy, Government of India.

In pursuance of the National Sustainable Development Habitat Mission on Energy Efficiency in Buildings, the Authority shall encourage the provisions of the following energy Efficiency Guidelines by certain mandatory provisions and incentives.

3. ECBC guidelines prepared by Bureau of Energy Efficiency, Ministry of Power, Government of India.
4. Model Energy Efficiency guidelines (NSMH Sub report by Bureau of Energy Efficiency).

13. Insertion of a new Chapter XII:

After Chapter XII of the Principal Law, the following new Chapter XIII shall be inserted, namely-

CHAPTER XIII
STREAMLINING OF BUILDING APPROVAL

78. Streamlining the building approval/sanction procedure (Ease of Doing Business)

Typically for any urban infrastructure development project, a number of clearances

are required. As per World Bank‘s Report Doing Business, 2014 India is ranked 183, out of 189 countries in terms of dealing with construction permits and on an average there are 37 procedures involved and 162 days are spent before obtaining permission for undertaking construction. It clearly signifies that the procedure for obtaining clearances is time consuming and projects often get stalled due to delay in obtaining clearances from various agenciesIn 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 along with building fees and other charges, and after due scrutiny, the approvals are also to be conveyed online.

Further, external bodies like Urban Art Commission (UAC), National Monuments

Authority (NMA), Airports Authority of India (AAI), Metro Rail Corporation (MRC),Heritage Conservation Committee (HCC), etc. grant No Objection Certificate (NOC)/approvals on the proposed building plans to the local bodies. All such external bodies are mandated to prepare online NOC systems compatible to and integrated with that of the local bodies and the desired information is to be sent to the concerned external bodies and their comments/ NOC/ approval are to be 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 CommonApplication Form (CAF) of the local body so that building proponent has to file all information at a single customized online application. The objective is to make the whole process simplified and streamlined to ensure ease in getting the approvals for building permit within stipulated time. Further, a procedure has been laid down in clause 2.14.1 d of the MBBL for sanction of building plans of small residential plots measuring up to 105 sqm. based on standard or other designs. The process is to facilitate building proponents of such small sized plots to either adopt standard plans or get their building plans prepared by a competent professional, and submit to the concerned local bodies along with fees, other charges, drawings and documents before commencement of the construction where the submission itself shall be deemed sanction. Hence, such persons may not have to wait for processes of approval from the local bodies to commence construction.

79. Clearances at Master Plan level

Individual construction proposals should not generally require separate clearances from various authorities each time. Such clearances should be integrated into the DCR of the Master/Development Plan of the concerned city. The areas unaffected by any of the restrictions should be clearly marked out and mapped, preferably on a GIS platform. Area zones of differential control regulations (within the city) by any of these agencies may also be mapped accordingly. This will result in a composite map of the city with various control regulations as per the various agencies clearly marked on the map. Thus, the sites which are located outside these restricted/regulated areas would not require availing clearance from the respective authorities, thereby reducing the clearance process significantly.

Following are the clearances which should be integrated into the city Master Plan-

Table 79.1 Clearances from various agencies proposed to be integrated in Master Plans

No	Name of Agency	Type of clearance	Area of influence
1	National Monument Authority through competent authority	Ancient Monument approval	As prescribed in theAMASAR (Amendment and Validation) Act, 2010 for protection of monuments
2	Ministry of Environment	Environment Clearance (EC)	As prescribed in the statutory provisions for EIA clearance based on the size of the project in accordance with Environment protection Act, 1986

3	Central Ground Water Authority	BorewellRegistration Certificate	As per Guidelines/criteria for evaluation of proposals/ requests for ground water abstraction, 2012
4	Ministry of Civil Aviation	AAI Height NOC	Critical and non-critical area as identified by AAI
5	Ministry of Defence	Defence Clearance	Areas in and around Defence Establishments as identified by MoD.
6	Coastal Zone Management Authority	NOC if (sea or coastal areas)	Areas under the CRZ regulations.
7	NHAI/PWD	Road access	Buffer zones as prescribed by NHAI along National Highways.
8	Ministry of Railways	Area clearance	Buffer zones as prescribed by Railways along the Rail tracks/depots/yards etc.

Efforts are on at the Government of India level to coordinate with all the central ministries and their organizations so that they streamline their own internal processes to issue no objection etc. where ever required by law. The efforts are mainly focused on delegating the powers at appropriate levels, establishing an online application process for time bound delivery, creating public awareness about their requirements, reviewing the restrictions and reducing them, sharing the data and norms with local authorities to be incorporated in DCR etc. Recognizing the concern for streamlining the procedures for clearances to be obtained from various departments in least possible number of procedures and number of days, the following model is given which suggests that the entire process of Pre and Post-Construction approvals should be completed within one month:

Table 79.2 Timelines of clearances from various agencies

No	Type of approval	Approving Authority	Stage of project	Normal duration (days)	Reduced duration (days)	Activity sequence
A	Intimation of Disapproval (IOD)	Development Authority/ Municipality	Preconstruction	30	5	Start Activity
B	Site & Building layout approval	Development Authority/ Municipality	Pre construction	30-60	5	Following A
C	NOC if near sea or coastal area	Coastal Zone Management Authority	Pre construction	30-60	10	Following B
D	Road access	NHAI/PWD	Pre construction	30	10	Following B
E	Ancient Monument approval	Archaeological Survey of India (ASI)	Pre construction	30	10	Following B
F	Environment clearance	Ministry of Environment	Pre construction	180	Only for large	Following B

					project	
G	Borewell registration certificate	Central Ground water Authority	Pre construction	30	15	Following B
H	Fire fighting Scheme approval	Fire Department	Pre construction	30	15	Following B
I	AAI Height NOC	Civil Aviation Department	Pre construction	30-60	10	Following B
J	Defence Clearance	Ministry of Defence	Pre construction	180	10	Following B
K	Building Permit Issue (NOC)	Development Authority/ Municipality	Pre construction		1	Max of After CJ
Sub total			**26 (Max)**			
L	Electric sub-station NOC (Sub-stations/Transformers in the building)	Electricity distribution Authority	During construction	15	5	After K
M	Damp Proof Course (on site)	Development Authority	During construction	7	3	After K
N	Pollution Clearance	State Pollution control Board	During construction	30-60	3	After L
Ø	Construction Complete	Construction Time depends on the project Scale and Size				
O	Building Completion Certificate	Development Authority/ Municipality	Post construction	30-60	5	After Ø
P	Service plan clearance and service connection	Service Departments/ Parastatals	Post construction	30	10	After O
Q	Occupancy certificate	Development Authority/ Municipality	Post construction	10	2	After P
Sub-Total			**17 (maximum)**			

Explanatory Notes:

1. The above Table and Chart indicates that the processes after the applicant applies for building approval with clear land title and possession of land. Hence, clearances related to CLU and Land Title has not been considered.

2. The table illustrates the duration of clearances obtained in Normal course and suggests the reduced duration of 26 days (Pre-Construction) if the Approving Authority **adopts online sanctions.**

3. Clearances indicated at Sl. Nos. C - J are concurrent with applications at the pre-construction stages, wherein their process of approval can be taken up simultaneously

4. Clearances indicated at Sl. Nos. L - N are concurrent with applications during-construction stage, wherein their process of approval can be taken up simultaneously.

5. S No. P has to be linked with S No. O, once applicant receives the **Completion Certificate,** service plan clearances and connections would be deemed to be sanctioned

80. Clearances at the Local Authorities

The Urban Local Bodies and Urban Development Authorities shall ensure clearance in minimum possible time. Clearances indicated at Sl. No. A,B,H,K,L,M,N,O,P, and have to be obtained at the local level and all efforts have to be made to sanction the building plan using online application procedures.

81. Options for reducing the timelines for approvals:

The above suggested model is only indicative, however, there is scope for streamlining the procedures for clearances to be obtained from various departments in the least possible number of procedures and number of days. The model should serve as a guide to Urban Local Bodies and Development Authorities for adoption. Since the number of procedures and duration varies from state to state, as per the local conditions, the model would require modifications to suit a specific city. Some of the options which can reduce the time taken for various procedures are:

(a) **Online sanctions**: Some of the ULBs/Development Authorities like Pune Municipal Corporation and West Bengal Housing and Industrial Development Corporation have introduced online sanction for issuing building plan and completion certificate. This process reduces the time taken to a large extent. The example of Pune and West Bengal may be considered in other States. The process involves use of software tools for scrutiny of building plans. All the documents are required to be submitted electronically using a portal. In case the building plans do not confirm to the DCR the deviations are listed out in form of a report and intimated to the applicant/engaged Competent Professional for building plan design, vide an online ID in his account.

(b) **Empowering Professionals:** Empowering Competent Professionals (as per Appendix E) for building plan design will facilitate to streamline the procedure for obtaining approvals. The Authority shall empanel such professionals based on their track record. The empowered professionals can, also on behalf of Developers/builders submit the documents required at the time of various clearances. Signing authority of Architects and Town planners for different size and type of layout shall be followed as per section 2.10.

Further to the **Standard Building Layouts** as specified in section 2.14.1 (d), any building proposed with a ceiling limit of 105 sqm of built-up area on plots of any size, conforming to the standard approved layout by the Authority shall be treated as deemed approved for construction. No formal sanction would be required for the owner/proponent who can submit a simple one page form alongwith other documents to the local body and can immediately take up construction work. Commencement of construction work on site shall

be undertaken as per clause 2.15.1of the bye-laws. The process of obtaining **"Completion Certificate"** can also be initiated by the owner by submitting "as-built drawings".

(c) **Outsourcing procedures:** Countries like USA, Australia and New Zealand have outsourced work pertaining to clearances and have appointed firms /companies to undertake the work on behalf of Authorities. This has been working very successfully and the procedure for obtaining clearances is free of any hassles and the same has become transparent and streamlined. The example of Passport office is a good case to study to build confidence in favour of outsourcing non discretionary activities in order to support limitations of capacity and manpower at the Authority.

(d) **Creating a Cell in ULB/Development Authorities:** There is a need for creating a specialized cell in Authority which is manned by qualified personnel conversant with the procedures and the interpretation of development regulations. The Cell should be headed by a qualified Town Planner who should lead a team of Architects, Engineers, Environment Specialist and Legal Experts among others. The cell should have the dedicated provision for online submissions and conveying the on line approvals as well. This will require robust software and hardware system capable of handling large digital files.

(e) **Single Window System:** This is a requirement that is growing popularity among the Authorities. All agencies involved in the process need to be integrated in a single electronic facility with proper coordination and monitoring of timelines. The Authority needs to constitute teams comprising of experts from various agencies to be formed under the overall supervision of a Town Planner designated to assist developers/ builders with complex projects and to constantly improve the sanction process by cutting down delays.

(f) **Integration of agencies outside the ULBs** for online clearances: Various agencies like AAI, NMA, SUAC, Fire Services, Department of Industries, Ministry of Defence, Metro Rail etc grant NOC clearance to the building plans in certain specific cases. This may be streamlines in the spirit of Ease of Doing Business by following 2 directions as given below –

i. Building permission for specific areas /sizes are to be examined by the external agencies. These areas should be plotted on GIS based colour-coded map which may be made available in the public domain on the agency's website, with clearly identified co-ordinates so that building falling only in these areas need to approach the concerned agencies for obtaining clearances. These maps may also be made available on the website of the concerned Local Bodies.

ii. The external agencies also need to develop online clearance/NOC application systems which should suitably be integrated with the online building approval systems of the Local bodies. The two systems should be so compatible that

the building plans submitted to the local bodies may after scrutinizing with colour-coded zoning maps shall be e-transmitted to the external agencies. The agency concerned should give clearance within a period of maximum of 10 days with no requirement of applicant to physically visit the offices of the agencies. The NOC may again be e-transmitted to the concerned local body on the building permission system so that the ULB shall use those for final approval.

82. Risk based classification of building proposals

There is a need for make provisions for fast tracking building permission procedures for all non-automatic approvals. Therefore, in the spirit of "Ease of Doing Business" the buildings have been classified further on the basis of risk parameter/risk based classification to clear the building permits on fast track system.

83. Residential buildings

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

Table No 83.1 Risk Matrix for different residential buildings

Risks		Very Low	Low	Moderate	High
Criteria	Parameters				
Size of the plot	Square meters	Below 105 m^2	105-500 m^2	Above 500 m^2	All sizes
Height of building	Metres	Below 15 m	Below 15 m	Below 15 m	15m and above
Use of the premise	Various categories	Residential plotted	Residential plotted	Residential plotted	Group Housing

* Group housing area is minimum 2000 sqm.

Suggested Fast tracking tools:

For Very Low Risk Buildings:

In case of standard building plans by the authority for residential plots upto 105 sqm. in size and forming part of the approved layout plan, the owner shall be entitled to sign such standard plans and the required documents for sanction. In such cases , certificate from professionals would not be necessary and the owner shall be bound to follow the approved standard plan in detail.

For very Low Risk Buildings:

A competent professional (qualification and competence as per Annexure –E) shall be empowered to issue the building permit, but only after submitting the plan along with requisite documents and fees to the concerned local body. If the owner/professional desires to get the building plan sanctioned by the local body, building plans prepared by a qualified architect/engineer will have to be submitted to the concerned local body along with the fees and other requisite documents and the local body shall grant the building permit within 10 days.

For Moderate Risk buildings:

Building plans and the building plans will have to be prepared by a competent professional and the building plans will have to be submitted to the concerned local body along with the fees and other requisite documents. The local body shall grant the building permit within 20 days.

For high Risk Buildings:

Clearance from Fire Department and other necessary clearances from AAI,NMA and other Agencies have to be obtained. Building Plans will have to be prepared by a competent professional and the building plans will have to be submitted to the concerned local body along with the fees and other requisite documents. The local body shall grant the building permit within 20 days.

84. Storage/Warehouses Buildings

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

Table 84.1 Risk Matrix for Storage/ Warehouses

	Very Low	Low	Moderate	High
Area on all floors/Built up area	Upto 250 m²	Above 250 m² and upto 2000 m²	Upto 2000 m²	Above 2000 m²
Height of building	Below 15 m	Below 15m	Below 15m	Below 15m
Abutting Road	Min 12 m	Min 12 m	Min 12 m	Min 12 m
Type of Material storage	Category A	Category A	Category B (stacking height-medium)	Category B (stacking height-High)

Note:

1. The level of Risk is classified according to the material stored in the warehouse/storehouse.

Suggested modes of fast tracking:

For Very Low Risk Buildings:

A competent professional (qualification and competence as per Annexure – e) shall be empowered to issue the building permit but only after submitting the plan along with requisite documents to issue the building permit, but only after submitting the plan along with requisite documents and fees to the concerned local body, he shall apply online to the local body and the local body shall grant the building permit within 10 days.

For Low Risk Buildings:

Building plans will have to be prepared by a competent professional and the building plans will have to be submitted to the concerned local body along with the fees and other requisite documents. The local body shall grant the building permit within 20 days.

For moderate risk buildings:

Building plans will have to be prepared by a competent professional and the building plans will have to be submitted to the concerned local body along with the fees and other requisite documents. The local body shall grant the building permit within 20 days.

For High Risk Buildings:

Building Plans will have to be prepared by a qualified architect and the building plans will have to be submitted to the concerned local body along with the fees and other requisite documents. The local body shall grant the building permit within 30 days.

Industrial Buildings:

For approval of the building meant for use as storage buildings/warehouses/godowns, risk based classifications shall be as per Table below

Table 84.2 Risk Matrix for industries

Risks		Low	Moderate	High
Criteria	parameters			
Size of the plot	Sq Square meters	Upto 350 m^2	About 350 m^2	All sizes
Height of the building	Meters	Less than 15 meters	Less than 15 meters	15 m and above
Abutting Road width	Meters	Min.12 m	Min.12 m	Min.12 m

i. The level of risk is classified according to the size and height of the industrial building proposed.

Suggested mode of Fast tracking;

For Low Risk Buildings:

1. Deemed Approval with Self- Certification
2. Plans to be submitted along with Structural drawings which does not require sanction.

For Moderate Risk Buildings:

1. Plans to be submitted to the empanelled professional.
2. Fire/Structural safety certification by Fire Services/ Structural Engineers.
3. Approval to be granted within 10 working days by the empanelled professional.
4. Approved plan to be submitted to ULB/DA.

For High Risk Buildings:

1. Online Application
2. Immediate acknowledgement by software.
3. Fire/Structural safety Certification by Fire Services/ Structural Engineers.
4. Approval by ULB/DA within 20 working days.

85. Other suggestions to enhance ease of doing business:

Some other suggestions regarding Fast-Track Construction Permits are:

86. Citizen's Charter

A Citizen's Charter Lists out the timelines and upper limits of time for the delivery of citizen services of the organisation. The objective of issuing the charter is to improve the quality of public service in terms of timely delivery. Such charters should be brought out by all municipalities to maintain high standards of accountability and transparency. The standards of service to be provided, the maximum number of days required for building approvals and the standard procedures should be listed out in Citizen's charter. Some states have gone a step further and introduced a citizen service delivery guarantee act whereby the timelines prescribed by a citizen charter are made statutory and binding on officials.

87. Capacity Building

Capacity building measures are to be adopted for such functionaries to identify Training Needs (TNA) and other technical requirement of duties that they are required to discharge. Fresh recruitments commensurate to the technical qualification/experience are to be made by the State government, if there is complete absence of the technical expertise needed by the said services.

88. Empowered Committee:

The Authorities may also consider constituting "Empowered Committee" or "Peer Expert Groups" for under taking scrutiny and approval. This Committee can be manned as per the requirement and area of more than one Municipality can be put

89. Simplification of Bye Laws:

The building Bye Laws need to be simplified for easy comprehension of lay person as well as professionals involved in developmental activities. The simplification process should also include the process of application, the filling up of forms and streamlining the process of application.

14. Insertion of a new Chapter XIV:

After Chapter XIII of the Principal Law, the following new Chapter XIV shall be inserted, namely-

CHAPTER XIV

CLIMATE RESILIENT CONSTRUCTION INTEGRATION OF ENVIRONMENTAL CLEARANCE WITH SANCTION

90. Land, Air, Noise, Water ,Energy biological/socio-economic/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 process to ensure compliance to various conditions laid down by the Ministry of Environment, Forest and climate Change.

The building construction sector is a major contributor towards carbon footprints which affects climate change. Indian is committed towards mitigating the effects of climate change and moving towards internationally accepted norms for environmental friendly building construction. Currently this objective of environmental safeguard is achieved through obtaining a specific environmental clearance (EC) for any construction project having a size of more than 20,000 sqm. This is administered under notification of Ministry of Environment, Forest and Climate Change.

With Rapid urbanization and growth of Indian economy, it is anticipated that the construction activity will experience a proportionate growth. Government is also committed towards streamlining of clearance for buildings and real estate sector and empowering the urban local bodies with an objective of Ease of Doing Business.

Environmental conditions for compliance during building approvals

The new building construction proposals are classified in the following 3 categories:

1) Conditions for Category "A" Buildings:
   Built up area 5000 sqm – 20000 sqm

Table 90.1 Environmental Conditions for buildings construction (Category "A" 5000SQ.M – 20000 sqm)

No.	Medium	Environmental Condition
1.	Natural Drainage	The inlet and outlet point of natural drainage system should be maintained with adequate size of channel for ensuring unrestricted flow of river.
2.	Water conservations-Rain Water Harvesting and Ground Water recharge	A rain water harvesting plan needs to be designed where the recharge bores (minimum one per 5000 sq.m of built up area) shall be provided. The rain water harvested should be stored in a tank for re use in household through a provision of separate water tank and pipeline to avoid mixing with potable municipal water supply. The excess rain water harvested be linked to the tube well bore in the premise through a pipeline after filtration in the installed filters.
2(a)		The unpaved area shall be more than or equal to 20% of the recreational open spaces.
3.	Solid Waste management	Separate wet and dry bins must be provided at the ground level for facilitating segregation of waste.
4.	Energy	In common areas, LED/solar lights must be provided.
5.	Air quality and Noise	Dust, smoke and debris prevention measures such as screens, barricading shall be installed at the site during construction, Plastic /tarpaulin sheet covers must be used for trucks bringing in sand and material at the site.
5(a)		The Exhaust pipe of the D.G. set, if installed must be minimum 10 m away from building. In case it is less than 10 m away, the exhaust pipe shall be taken up to 3 m above the building.

6.	Green cover	A minimum of one tree for every 80 sq.m of land shall 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 with the obligation to provide continued maintenance for such plantations.

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