

CANTONMENT BOARD MATHURA

DRAFT BUILDING BYE LAWS

2016

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1. DEFINITIONS

General

In these Bye-Laws, unless the context otherwise requires the definition given shall have the meaning indicated against each term.

All mandatory Master Plan/Zonal Plan regulations regarding use, land use, coverage, FAR, set-back, open space, height, number of stories, number of dwelling units, parking standards etc. for various categories of buildings including modification therein made from time to time shall be applicable mutatis mutandis in the Building Bye-Laws regulations under this clause. All amendments / modifications made in the aforesaid regulations shall automatically stand deemed to have been included as part of these Bye-laws.

Definitions

1. **“Access”** - A clear approach to a plot or a building.
2. **“Act”**- The Cantonment Act 2006.
3. **“Addition and/or 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 of any wall or part of a 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 egress or a change to fixtures or equipment" as provided in these Bye-Laws.
4. **“Advertising Sign”**- Any surface or structure with characters, letters or illustrations applied thereto and displayed in any manner whatsoever outdoors for the purpose of advertising or giving information or to attract the public to any place, person, public performance, article, or merchandise, and which surface or structure is attached to, forms part of, or is connected with any building, or is fixed to a tree or to the ground or to any pole, screen, fence or hoarding or displayed in space, or in or over any water body included in the jurisdiction of the Authority.
5. **“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.
6. **“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.
7. **“Application”**- An application made in such form as may be prescribed by the Act for Cantonment Board from time to time.
8. **“Approved”**- As approved/sanctioned by the Authority under applicable Bye-Laws.
9. **“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 alongwith registered with Cantonment Board.
10. **“Architect/Professional on record”**- An architect/Competent professional who is brought on record to represent his/her client for a construction project, to act on their behalf regarding building permits and process of construction (as detailed at Section

11. **“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
12. **“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; hereinafter 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.
13. **“Balcony”**- A horizontal projection, cantilevered or otherwise including a parapet" handrail, balustrade, to serve as a passage or sit out place.
14. **“Barsati”**- A habitable room/rooms on the roof of the building with or without toilet / kitchen.
15. **“Basement or Cellar”**- The lower storey of a building, below or partly below the ground level, with one or more than one levels.
16. **“Building”**- A structure constructed with any materials whatsoever for any purpose, 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 a building 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 pool, 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".

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 in its campus or outside.
- c. **“Institutional Building”**- 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, "mangal karyalayas", skating rinks, gymnasias, 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 wholesale 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 part thereof wherein products or material are 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 or 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 wholesale trade and manufacture, wholesale outlets, including related storage facilities, warehouses and establishments engaged in truck transport, including truck transport booking agencies.

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-Storeyed Building or High Rise Building”**- A building above 4 stories, and/or a building exceeding 15 meters or more in height (without stilt) and 17.5M (including stilt).
- c. **“Semi-detached Building”**- A building detached on three sides with open space as specified in these regulations.

Types of buildings based on other features:

- a. **“Special Building”**- Includes all buildings like assembly, industrial, buildings used for wholesale establishments, hotels, hostels, hazardous, mixed occupancies with any of the aforesaid occupancies and centrally air conditioned buildings having total built up area exceeding 500 sq m.
- 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.

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 /structure will require 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.

- 17. **“Building Height”**- The vertical distance measured
 - i) In the case of flat roofs from the average level of the front road and continuance to the highest point of the building.
 - ii) In case of pitched roofs upto 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 upto the terrace level for the purpose of fire safety requirement.

- 18. **“Building Envelope”** - The horizontal spatial limits up to which a building may be permitted to be constructed on a plot.
- 19. **“Building Line”**- The line upto which the plinth of building adjoining a street or an extension of a street or on a future street may lawfully extend and includes the lines prescribed, if any, in any scheme and/or development plan. The building line may change from time-to-time as decided by the Authority.
- 20. **“Cabin”**- A non-residential enclosure constructed of non-load bearing partitions.
- 21. **“Canopy”**- shall mean a cantilevered projection from the face of the wall over an entry to the building at the lintel or slab level provided that:
 - i) It shall not project beyond the plot line.

- ii) It shall not be lower than 2.3 m. or 7'- 6" when measured from the ground.
 - iii) There shall be no structure on it and the top shall remain open to sky.
22. **“Carpet Area”** - The covered area of the usable rooms of a dwelling unit / at any floor (excluding the area of the walls).
 23. **“Chajja”**- A sloping or horizontal structural overhang provided over openings on external walls for protection from the weather.
 24. **“Chimney”**- A construction by means of which a flue is formed for the purpose of carrying products of combustion to the open air and includes a chimneystack and flue pipe.
 25. **"Construction"** - Any erection of a structure or a building, including any addition or extension thereto either vertically or horizontally, but does not include, any reconstruction, repair and renovation of an existing structure or building, or, construction, maintenance and cleansing of drains and drainage works and of public latrines, urinals and similar conveniences, or, the construction and maintenance of works meant for providing supply of water for public, or, the construction or maintenance, extension, management for supply and distribution of electricity to the public; or provision for similar facilities for publicity.
 26. **“Conversion”**- The change from one occupancy to other occupancy or any change in building structure or part thereof resulting in a change of space and use requiring additional occupancy certificate.
 27. **“Cornice”**- means a sloping or horizontal structural overhang usually provided over openings or external walls to provide protection from sun and rain.
 28. **“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.
 29. **“Covered Area”**- The Ground area covered immediately above the plinth level covered by the building but does not include the space covered by:
 - a. Garden, rockery, well and well structures, plant nursery, water pool, swimming pool (if uncovered), platform round a tree, tank, fountain, bench, chabutra with open top and unenclosed on sides by walls and the like;
 - b. Drainage culvert, conduit, catch-pit, gully-pit, chamber, gutter and the like;
 - c. Compound wall, gate, slide/ swing door, canopy, and areas covered by chajja or similar projections and staircases which are uncovered and open at least on three sides and also open to sky.
 30. **“Damp Proof Course”**- A course consisting of some appropriate water proofing material provided to prevent penetration of dampness or moisture.
 31. **“Density”**- The residential density expressed in terms of the number of dwelling units per hectare.

Note: Where such densities are expressed exclusive of community facilities and provision of open spaces and major roads (excluding incidental open spaces), these will be net residential densities. Where these densities are expressed taking into consideration the required open space provision and community facilities and major roads, these would be gross residential densities at neighbourhood level, sector level or town level, as the case may be. The provision of open spaces and community facilities will depend on the size of the residential community. Incidental open spaces are mainly open spaces required to be left around and in between two buildings to provide lighting and ventilation.

32. **“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 subdivision of any land and ‘to develop’ shall be construed accordingly.
33. **“Development Plan”**- See “Master Plan”
34. **“Drain”**- A conduit or channel for the carriage of storm water, sewage, waste water or other waterborne wastes in a building drainage system.
35. **“Drainage system”** - A system or a line of pipes, with their fittings and accessories, such as manholes, inspection chambers, traps, gullies, floor traps used for drainage of building or yards appurtenant to the buildings within the same cartilage; and includes an open channel for conveying surface water or a system for the removal of any waste water.
36. **“Dwelling”**- A building or a portion thereof which is designed or used wholly or principally for residential purposes for one family.
37. **“Empanelled Architect”**- A person empanelled by the Authority as per rules under the bye-laws as an authorized person to sanction building plans of residential buildings upto 15 m. in height and for plot sizes upto 500 sqm, forming part of any approved lay-out plan.
38. **“Encroachment”**- means an act to enter into the possession or rights either of permanent or temporary nature on a land or built up property of local body or state/ central Government.
39. **“Enclosed Staircase”**- means a staircase separated by fire resistant walls and doors from the rest of the building.
40. **“Existing Building”**- A building or structure existing authorisedly with the approval of the Authority before the commencement of these Bye-Laws.
41. **“Existing Use”**- Use of a building or structure existing authorisedly with the approval of the Authority before the commencement of these Bye-Laws.
42. **“Exit”**- A passage channel or means of egress from the building, its storey or floor to a street or, other open space of safety; whether horizontal, outside and vertical exits meaning as under:-
- i) Horizontal exit means an exit, which is a protected opening through or around a fire well or bridge connecting two or more buildings.
 - ii) Outside exit mean an exit from building to a public way to an open area leading to a public way or to an enclosed fire resistant passage leading to a 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.
43. **“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.
44. **“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 termed as floor- 2, and so on upwards.
45. **“Floor Area Ratio (FAR)”**- 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.: -

$$\text{Floor Area Ratio (FAR)} = \frac{\text{Total Covered Area on All Floors}}{\text{Plot Area}}$$

46. **“Fire and/or 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.
47. **“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 etc.
 - 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.
48. **“Fire Lift”**- Means a special lift designed for the use of fire service personnel in the event of fire or other emergency.
49. **“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.
50. **“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/cm² at the topmost level of multi-storey or high rise building.
51. **“Fire Pump-Booster Fire Pump”**- Means a mechanical/electrical device that boots up the water pressure at the top level of a multi-storeyed / high-rise building and which is capable of a pressure of 3.2 kg/cm² at the nearest point.
52. **“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°C and/or average temperature of 150°C.
- 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.
53. **“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.
54. **“Fire Service Inlet”**- Means a connection provided at the base of a building for pumping up water through in built fire-fighting arrangements by fire service pumps in accordance; with the recommendation of the Chief Fire Officer.
55. **“Fire Tower”**- Means an enclosed staircase that can only be approached from the various floors through landings or lobbies separated from both the floor area and the staircase by fire resistant doors and open to the outer air.

56. **“Fire Resisting Building”**- means a building in which material, which has, appropriate degree of fire resistance is used.
57. **“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.
58. **“Foundation”**- A substructure supporting an arrangement of columns or walls in a row or rows transmitting the loads to the soil
59. **“Front Air Plane”**- The plane contained between the ground in front of the building and the straight lines drawn downwards and outwards from the line of intersection of the outer surface of any front wall of the building with the roof perpendicular to that line, and at an angle of 63-1/2 degrees to the horizontal;
- Note: The 63-1/2 degrees angle has a tangent of 2:1 so that if the ground is the level, the air plane reaches the ground at a distance from the exterior wall equal to half the height of the above level of that ground.*
60. **“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 structures provided for seating in stadia.
61. **“Garage-Private”**- A building or a portion thereof designed and used for the parking of vehicle.
62. **“Garage-Public”** - A building or portion thereof, designed other than as a private garage, operated for gain, designed and/or used for repairing, servicing, using, selling or storing or parking motor driven or other vehicles.
63. **“Ground Floor”**- shall mean storey, which has its floor surface nearest to the ground around the building.
64. **“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..
65. **“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 a 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.
66. **“Illuminated Exit Signs”**- A device for indicating the means of escape during normal circumstances and power failure.
67. **“Jhamp”**-A downward, vertical or sloping projection hanging below any horizontal projection like balcony, canopy, verandah, passage etc, to provide protection from direct sun and rain.
68. **“Jhot”** -A strip of land permanently left open for drainage purposes. It is not to be used as an access way or a street and is not to be included as a part of setbacks.
69. **“Katra or Chawl”**-A building so constructed as to be suitable for living in separate tenements each consisting a single room, or of two, but not of more than two rooms and with common sanitary arrangements.
70. **“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.

71. **“Ledge or Tand”**- A shelf-like projection, supported in any manner whatsoever, except by means of vertical supports within a room itself but not having projection wider than 1 m.
72. **“Licensed Architect / Town Planner / Engineer / Supervisor / Plumber”**- Qualified professionals who have been registered with the Authority as per the Qualification and competence / by the body governing such profession and therefore possess the license to provide professional services in Building construction.
73. **“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 synonymously used for ‘lift’.
74. **“Lobby”**- means a covered space in which all the adjoining rooms open.
75. **“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 meters.
76. **“Light Plane”**- The plane lying between the line of intersection of the floor of any room in a building with the outer surface or an exterior wall of the building and the straight lines drawn upwards and outwards from those lines drawn upward and outwards from lines perpendicular thereto at an angle of $63 \frac{1}{2}^\circ$ to the horizontal.

Note: For the purpose of the definition of light plane, the outer surface of any verandah abutting on an interior or side open space shall be considered to be the exterior wall of the building.

77. **“Masonry”** - An assemblage of masonry units properly bound together by mortar.
78. **“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.
79. **“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.
80. **“Means of Escape”**- An escape route provided in a building for safe evacuation of occupants.
81. **“Mezzanine Floor”**- An intermediate floor between two floors of any storey forming an integral part of floor below.
82. **“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.
83. **“MCB/ELCB”**- Devices for tripping of electrical circuits in event of any fault in the circuit/installation.
84. **“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.
85. **“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.

- “Mixed occupancy”** buildings being those in which more than one occupancy is present in different portions of the buildings.
86. **“Open space”**- An area forming an integral part of a site left open to the sky.
87. **“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.
88. **“Parapet”**- A low wall or railing built along the edge of a roof or a floor.
89. **“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.
90. **“Partition”**- An interior non-load bearing barrier, one storey or part-storey in height.
91. **“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.
92. **“Permanent Open Air Space”**- Air space permanently open:
- i) If it is a 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.
93. **“Permission or Permit”**- A valid permission or authorization in writing by the competent Authority to carryout development or a work regulated by the Bye-Laws.
94. **“Plinth”**- The portion of a structure between the surface of the surrounding ground and surface of the floor immediately above the ground.
95. **“Plinth Area”**- The built up covered area measured at the floor level of the basement or of any storey.
96. **“Plot/ Site”**- A parcel or piece of land enclosed by definite boundaries.
97. **“Plotted Development”** – Type of development layout wherein a stretch of developed land is divided into regular sized plots for uniform controlled building volumes.
98. **“Porch”**- A covered surface supported on pillars or otherwise for the purpose of a pedestrian or vehicular approach to a building.
99. **“Prohibited area”** means any area specified or declared to be a prohibited area under section 20A of the AMASR Act, 2010.
100. **“Protected monument”** means an ancient monument which is declared to be of national importance by or under the AMASR Act, 2010.
101. **“Regulated area”** means any area specified or declared under section 20B under the AMASR Act, 2010.

102. **“Retention Activity”**- An activity or use which is allowed to continue, notwithstanding its non-conforming nature in relation to the use permitted in the adjoining or surrounding area.
103. **“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, sidewalks, traffic islands, roadside trees and hedges, retaining walls, fences, barriers and railing within the street lines .
104. **“Road/Street Level or Grade”**- The officially established elevation or grade of the centerline of street upon which a plot fronts, and if there is no officially established grade, the existing grade of street at its mid-point.
105. **“Road/Street Line”** -The line defining the side limits of a road/street.
106. **“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.
107. **“Row Housing”** -A row of houses with only front, rear and interior open spaces.
108. **“Rear Air Plane”** - The plane contained between the ground behind the building and the straight line drawn downwards and outwards from the line of intersection of the outer surface of any rear wall of the building with the roof perpendicular to that line and at an angle 63-1/2 degree to the horizontal.
109. **“Room Height”**- The vertical distance measured from the finished floor surface to the finished ceiling surface. Where a finished ceiling 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.
110. **“Service Road”**- A road/lane provided at the front, rear or side of a plot for service purpose.
111. **“Set-back Line”**- A line usually parallel to the plot boundaries or center line of a road and laid down in each case by the Authority or as per recommendations of Master/Zonal Plan, beyond which nothing can be constructed towards the plot boundaries excepting with the permission of the Authority.
112. **“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.
113. **“Site”**- See “Plot”
114. **“Site Corner”**- A site at the junction of and fronting on two or more intersecting roads or streets.
115. **“Site Depth”**- The mean horizontal distance between the front and rear site boundaries.
116. **“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.
117. **“Site with Double Frontage”**- A site having frontage on two streets other than corner plot.

118. **“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.
119. **“Spiral Staircase”**- A staircase forming continuous winding curve round a central point or axis provided in a open space having tread without risers.
120. **“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.
121. **“To abut”**- To be positioned juxtaposed to a road, lane, open space, park, building etc.
122. **“To Erect”**- in relation to a building means:
- i) To erect a new building on any site whether previously built upon or not;
 - ii) To re-erect any building of which portions above the plinth level have been pulled down, burnt or destroyed.
123. **“Un-authorized Construction”**- means the erection or re-erection, addition or alternations which is not approved or sanctioned by the Authority.
124. **“Underground/Overhead Tank”**- An installation constructed or placed for storage of water.
125. **“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.
126. **“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.
127. **“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.
128. **“Window”**- An opening to the outside other than a door, which provides all or part of the required natural light or ventilation or both to an interior space and not used as a means of egress/ingress.
129. **“Zonal Plan”**- A plan detailing out the proposals of Master Plan and acting as a link between 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.
130. **Layout plan fee:** - 15 % fee will be charged for single layout plan approval by this Board, which the layout plan is not approved by this Board i.e. Railway colony, Hanuman Nagar Colony and Raja Ram Patti.

2. JURISDICTION / APPLICABILITY AND BUILDING DOCUMENTATION PROCEDURES

2.1 Jurisdiction of Building Bye Laws

The Building Bye-Laws shall apply to the building activity in the Jurisdiction limit of Cantonment Board Mathura and will be called Building Bye Laws Mathura Cantonment 2016.

2.2 Applicability of Building Bye Laws

These building byelaws shall be applicable to all building activities and read in conjunction with the master plan/development plan/regional plan/any other statutory plan in force, if any, and notifications, if any, with regard to the same and as amended from time to time and shall be applicable for a period of TEN years after which they shall be reviewed. Till such time the reviewed building byelaws are notified, these building byelaws will continue to be in force.

2.3 Development and part construction

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

2.4 In case of Part construction

Where the whole or part of a building is demolished or altered or reconstructed, except where otherwise specifically stipulated, these Building Bye-Laws shall apply only to the extent of the work involved.

2.5 Change of use / occupancy

Where use of a building is changed, except where otherwise specifically stipulated, these Building Bye-Laws shall apply to all parts of the building affected by the change.

2.6 Reconstruction

The reconstruction in whole or part of a building which has ceased to operate due to fire, natural collapse or demolition having been declared unsafe, or which is likely to be demolished by or under an order of the Authority as the case may be and for which the necessary certificate has been given by the Authority.

2.7 Existing approved building

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

2.8 Development

2.8.1 Development Permission:

No person shall carry out any development or redevelopment including subdivision on any plot or land (not forming part of any approved layout plan or scheme) or cause to be done without obtaining approval from the Board for the layout plan.

2.8.2 Building Permit:

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

2.8.3 Pre-Code Building Permit:

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

2.9 Procedure for obtaining building permit

2.9.1 Notice:

Every person who intends to erect, re-erect or make alternation in any place in a building or demolish any building shall give notice in writing to the Board under Section 235 of Cantt Act of his intention in the prescribed form and such notice shall be accompanied by plans and statements in sufficient copies. The plans may be ordinary prints on ferro-paper or any other type, one set of which shall be laminated. One set of such plans shall be released and the rest retained in the office of the Board for record after the issue of permit or refusal as the case may be.

2.9.2 Copies of Plans and Statements:

Normally 3 copies of plan and statement shall be made available along with the notice. In case of building schemes where the clearance is required from Chief Fire Officer, the number of copies of the plans and statements accompanying the notice shall be 6. In case of sites requiring the clearance of lessor, extra copies of the plan shall be made available.

2.9.3 Information Accompanying Notice:

The notice shall be accompanied by the location plan, site plan, subdivision / layout plan, building plan, services plan, specifications and certificate of supervision, ownership title and other documents as prescribed by the Authority.

2.9.4 Documents:

Application for building permit shall be accompanied by the following documents: Ownership Documents-lease-deed/sale-deed etc. duly accompanied by an annexed site plan; giving the physical description of the plot/property. In such cases where lease-deed has not been executed, no objection certificate from the Authority/lessor.

In case of any deviation from the terms and conditions stipulated in the lease deed/ownership document, necessary clearance from the Board shall be obtained.

Documents required to be attached shall be as follows:

- i. No objection certificate from the Board regarding land use as per Master/Zonal Plan, if required.
- ii. Approval from the Chief Inspector of Factories in case of Industrial Buildings; as well as from the Pollution Control Board, wherever required.
- iii. Approval from Chief Controller of Explosives, Nagpur and Chief Fire Officer, in case of hazardous buildings.
- iv. Indemnity Bond in case of proposal for the construction of a basement as given in **Appendix- 'B'**.
- v. No objection certificate from the Civil Aviation Department wherever required.
- vi. Receipt of amount deposited at the Board for processing fees.
- vii. In case the site falls in the built-up area declared as slum under any Act NOC from the Competent Authority, from slum clearance and land use points of view.
- viii. In case of the leasehold plots, clearance from the lessor with regard to the lease conditions shall be obtained wherever required.
- ix. Any other information/document, which the Authority may require in case of listed buildings or otherwise.

Other documents to be submitted in special cases shall be as follows:

- x. Additional documents required for conservation of Heritage sites including Heritage Buildings, Heritage/Precincts and Natural Features Areas (wherever required)

2.9.5 Size of Drawing Sheets and Colouring of Plans

The size of drawing sheets shall be any of those specified in Table 2.1.

Table 2.1 Drawing Sheet Sizes

	Designat	Trimmed Size, (mm.)
	A1	594 x 841
	A2	420 x 594

2.9.6 Colouring Notations for Plans:

The plans shall be coloured as specified in Table 2.2 Further, prints of plans shall be on one side of paper only.

2.9.7 Dimensions:

All dimensions shall be indicated in metric units.

Table 2.2 Colouring of Plans

Sl	Item	Site Plan			Building Plan		
		White Plan	Blue Print	Ammonia	White Plan	Blue Print	Ammonia
a	B	c	D	E	f	g	h
1	Plot Lines	Thick black	Thick black	Thick black	Thick black	Thick black	Thick black
2	Existing street	Green	Green	Green	—	—	—
3	Future street, if any	Green dotted	Green dotted	Green dotted	—	—	—
4	Permissible building lines	Thick dotted black	Thick dotted Black	Thick dotted black	—	—	—
5	Open spaces	No colour	No colour	No colour	No colour	No colour	No colour
6	Existing work	Black	White	Blue	Black	White	Blue
7	Work proposed to be	Yellow	Yellow	Yellow		Yellow	Yellow
8	Proposed work (<i>see Note 1</i>)	Red filled in	Red	Red	Red	Red	Red
9	Drainage and sewerage	Red dotted	Red dotted	Red dotted	Red dotted	Red dotted	Red dotted
	Compounding area	Green	Green	Green	Green	Green	Green
11	Water supply work	Black dotted thin	Black dotted Thin	Black dotted thin	Black dotted thin	Black dotted thin	Black dotted thin

Notes:

1 For entirely new construction this need not be done; for extension of an existing work this shall apply.

2 For land development, subdivision, layout, suitable colouring notations shall be used which shall be indexed.

2.10 All Plans

2.10.1 i) Key Plan: A key plan drawn to a scale of not less than 1: 10,000 shall be submitted along with notice showing boundary and location of the site with respect of neighborhood land marks, in area where there is no approved layout plans.

ii) Site Plan: The site plan to be sent along with the application for permit shall be drawn to a scale of 1: 100 for plots upto 500 sq. mt. in size and on a scale of 1:500 for plots above 500 sq. mt. in size. The plan shall show as below:

- a) The boundaries of the site and any contiguous land belonging to the owner thereof.
- b) The position of the site in relation to neighboring street.
- c) The names of the streets on which the building is proposed to be situated, if any.
- d) All existing buildings standing on, over or under the site.
- e) The position of the building and of all other buildings, if any, which the applicant intends to erect upon his contiguous land referred to in (a) in relation to.
 - i) The boundaries of the site and in case where the site has been partitioned, the boundaries of the portion; owned by the applicant and also of the portions owned by others.
 - ii) All adjacent streets / buildings (with number of storeys and height) and premises within a distance of 12m. of the site and of the contiguous land, if any, referred to in (a); and
 - iii) If there is no street within a distance of 12 mt. of the site, the nearest existing street.
 - f) The means of access from the street to the building, and to all other buildings, if any which the applicant intends to erect upon his contiguous land, referred to in (a).
 - g) Space to be left about the building to secure a free circulation of air, admission of light and access.

- h) The width of the street, if any, in front, at the sides or rear of building.
- i) The direction of north point relative to the plan of the buildings.
- j) Any existing physical features such as well, drains, trees, over head electric supply lines etc.
- k) The ground area of the whole property and the breakup of covered area on each floor with the calculation for percentage covered in each floor in terms of the total area of the plot as required under the Bye-Laws governing the coverage of the area.
- l) Parking plans indicating the parking spaces wherever required.
- m) Such other particulars as may be prescribed by the Authority; and
- n) Building number or plot number of the property on which the building is intended to be erected.

2.10.2 Requirement in respect of building sites

a) Minimum Size of Site

The minimum size of sites for the construction of different types of building or different use groups, shall be in accordance with provisions of the Master Plan and any land development Rules and Regulations of the Authority.

b) Distance from Electric Line

The distance in accordance with the current electricity rules and its amendments from time to time is to be provided between the building and overhead electric supply line.

Table 2.3 Clearances from Electric Supply Lines

Type of Supply Line	Vertical clearance	Horizontal clearance
a) Low and medium voltage lines and service lines	2.50 m.	1.20 m.
b) High voltage lines upto and including 11,000 volts	3.70 m.	1.20 m.
c) High voltage lines above 11,000 volts and upto and including 33,000 volts	3.70 m.	2.00 m.
d) Extra high voltage lines additional 33,000 volts	3.70m. Plus 0.3 m. for every additional 33,000 V or part thereof.	2.0m. Plus 0.3 m. for every additional 33,000 V or part thereof.

2.10.3 Layout Plan:

The layout plan shall be formulated as per the norms of Master Plan and shall be approved as per the procedure followed by the Board, under the provisions of relevant Act.

2.10.4 Landscape Plan:

Landscape plan is to be to the scale of 1:100 for plot upto 500 sq.m in size and for plots above 500 sq.m., the scale shall be 1:500, indicating the circulation and parking spaces, pathways (hard surface), greenery and plantation (soft area) etc.

2.10.5 Building Plan:

The plans of the building, elevations and sections accompanying the notice with dimensions shall be drawn to a scale of 1:50 for plots measuring upto 250 sq.m., for plots measuring above 250 sq.m. to a scale of 1:100, and for plots measuring 2000 sq.m. and above to a scale of 1:200 with details on a scale of 1:100 and shall:

- a) Include floor plans of all floors together with the covered area clearly indicating the size and spacing of all frame members and sizes of rooms and the position and width of staircases, ramps and other exit ways, lift ways, lift machine room and lift pit details.
- b) Show the use or occupancy of all parts of the building.
- c) Show exact location of essential services, for example W.C., Sink, Bath etc.
- d) Include sectional drawing showing clearly the sizes of the footings, thickness of basement wall, wall construction, size and spacing of framing members, floor slabs and roof slabs with their materials. The section shall indicate the heights of building and rooms and also the heights of the parapet and drainage and the slope of the roof. At least one section shall be taken through the staircase, kitchen and toilet, bath and W.C.
- e) Show all elevations.
- f) Indicate details of service privy, if any.
- g) Give dimensions of the projected portions beyond the permissible building line.
- h) Include terrace plan indicating the drainage and the slope of the roof.
- i) Give indications of the north point relative to the plan.
- j) Details of parking spaces provided.
- k) Give indication of all doors, windows and other openings including ventilators with sizes in proper schedule.
- l) Such other particulars as may be required to explain the proposal clearly and as prescribed by the Authority.

Notes – The requirement of 1:100 is permitted to be flexible for specific details needed for further illustration; and also for drawings for these in electronic form.

2.10.6 Services Plan and Water Supply Provisions

- a) Plans, elevations and sections of private water supply, sewage disposal system and details of building services, shall be made available to a scale not less than 1: 100.
- b) For residential plots more than 2000 sq.m. and non-residential plots more than 1 hectare in size, the following provisions shall be made:
 - i) Separate conveying system to be provided for sewerage and sullage to facilitate reuse of sullage water for gardening and washing purposes. This may require suitable storage facilities that are to be indicated on the building plans
 - ii) For recharging ground water, rainwater-harvesting provisions are to be provided within the plot, which are to be indicated on the building plans.

Besides the normal drawings, which are submitted for the sanction of any building, a proper landscape plan, a circulation plan indicating vehicular and pedestrian movement and parking and an urban design scheme where necessary, shall be submitted for sanction by the Authority

Specifications: General specification of the proposed construction giving type and grade of material proposed to be used in the form given in Appendix - 'A' duly signed by the engaged Competent Professional for building plan design may be shown accompanying the notice as the case may be.

2.11 Signing of plans

2.11.1 Signing the Building Plans:

All plans before submission to the Authority shall be signed by the owner(s) and by a qualified *Architect* who has valid registration with Council of Architecture and registered with Board

2.11.2 Layout Plans:

All layout plans before submission to the Authority shall be signed by the owner(s) and by one of the following:

- a) *Architect* holding a valid registration with the Council of Architecture for Layout Plans of plots measuring upto 1 Ha. in size.
- b) Town Planner holding valid registration with the Institute of Town Planners, India for plots measuring beyond 1 Ha.

2.12 Building permit fees

Building fees for covered area in plotted development/group housing; additions/alterations/revised plan; revalidation of plans; plan submission fee; for NOC/occupancy; for use of city infrastructure during the construction and other charges as applicable will be have to be paid to the Board.

2.13 Sanction

2.13.1 Standard Building Plans: In case of standard building plans prepared by the Authority for residential plots *upto 105 sq.mt.* 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. The owner shall undertake construction of the so formed standard housing units in compliance to clause b) above.

2.13.2 Grant of Permit or Refusal

- a) The Authority shall either sanction or refuse sanction to the plans and specifications or may sanction them with such modification or directions as it may deem necessary and thereupon shall communicate its decision to the person giving the notice.
- b) The building plans for Hazardous or buildings identified by authority shall be subject to the scrutiny of the Chief Fire Officer and building permit shall be given by the Authority only after the clearance from the Chief Fire Officer is obtained.
- c) In case where the building scheme requires the clearance of an Urban Art Commission, if constituted for the city then the Authority shall issue the building permit only after getting the clearance from the Urban Art Commission.

- d) Once the plan has been scrutinized and objections have been pointed out, the Owner who has given the notice under Section of Act shall modify the plan to comply with the objections raised and resubmit the modified plans. The Authority shall scrutinize the resubmitted plans and if, there are still some objections that shall be intimated to the applicant for compliance. Only thereafter the plans shall be sanctioned. It is further clarified that:
- i) The above provision of deemed sanction shall be applicable only in those cases where construction is to be carried on plot forming part of an approved layout plan of the Authority.
 - ii) No notice under Section 235 shall be valid unless the information required by the Authority under these Bye-Laws or any further information which may be required has been furnished to the satisfaction of the Authority.
 - iii) The Owner/ engaged Competent Professional for building plan design and others shall be fully responsible for any violation of Master Plan/Zonal Plan/ Building Bye-Laws, architectural controls, lease deed conditions etc. In case of any default they shall be liable for action. Any construction so raised shall be deemed to be unauthorized and shall be liable for action.

2.13.3 Duration of Sanction/Revalidation:

Once a building permit is sanctioned, it shall remain valid as per provisions of Cantt Act.

2.13.4 Revocation of Permit:

The Authority shall revoke any building permit issued under the provisions of the Bye- Laws, wherever there has been any false statement, mis-representation of material facts in the application on which the building permit was based. Or
If during construction it is found that the Owner has violated any of the provisions of the Building Bye-Laws or sanctioned plan or compoundable limits.

Fresh sanction of building plans and occupancy certificate shall be taken from the Authority after bringing the building within the framework of Master Plan/ Zonal Plan/ Building Bye-Laws.

2.13.5 Penal Action

- a) The Authority reserves the right to take action and to debar/blacklist the Town Planner, Architect, Engineer, Supervisor or Plumber, if found to have deviated from professional conduct or to have made any false statement or on account of misrepresentation of any material facts or default either in authentication of a plan or in supervision of the construction against the building Bye-Laws and the sanctioned building plans.
- b) If the sanctioning Authority finds at any time any violation of the building Bye- Laws or misrepresentation of facts, or construction at variance with the sanction or building Bye-Laws, inclusive of the prescribed documents, the Authority shall revoke the sanction and take appropriate action against such professional and such professional shall not be authorized to submit fresh plans till finalization of the case. Before debarring or blacklisting such professional if found to be indulging in professional misconduct or where she/he has misrepresented any material facts, the Authority shall issue a show cause notice with an opportunity of a personal hearing and shall pass an order to debar her/him for submission and supervision of the construction with full justification for the same. An appeal against this order shall lie with the Authority with whom she/he is registered.

2.13.6 Unauthorized Development

In case of unauthorized development, the Authority shall take suitable action as per provisions of Cantt Act, which may include demolition of unauthorized works, sealing of premises, prosecution and criminal proceeding against the offender in pursuance of Cantt Act.

2.14 Procedure during Construction work

2.14.1 a) Construction to be in Conformity with Bye-Laws –

Owners' liability: Neither the granting of the permission nor the approval of the drawings and specification, nor inspection by the Authority during erection of the building, shall in any way relieve the Owner of the building from full responsibility for carrying out work in accordance with these Bye-Laws.

b) Commencement of work: The owner, within the validity period of the building plan sanction given, shall start the construction work at the site for which building permit has been granted under the supervision of the Architect / Engineer.

The owner shall be required to submit notices to the Authority for construction as per provision of Cantt. Act.

2.14.2 Documents at Site:

The person to whom a permit is issued shall, during construction keep, posted in a conspicuous place on the property in respect of which the permit was issued.

- a) A copy of the building permit;
- b) A copy of the approved drawings and specifications referred in Bye-Laws 2.14 of the property in respect of which the permit was issued.
- c) Where tests of any materials are made to ensure conformity with the requirements of the Bye-laws, records of test data shall be kept available for inspection during the construction of the building and for such a period thereafter as required by the Authority.

2.15 Connection to the municipal sewer / water mains

- a) Temporary connection for water, electricity or sewer, permitted for the purpose of facilitating the construction, shall not be allowed to continue in the premises without obtaining completion/occupancy certificate.
- b) No connection to the Cantt Board/Municipal water mains or to the Cantt Board/Municipal sewer line with a building shall be made without the prior permission of the Authority and without obtaining occupancy /completion certificate.
- c) In case the use is changed or unauthorized construction is made, the Authority is authorized to discontinue such services or cause discontinuance of such services.

3.0 DEVELOPMENT CODES

Parking standard

Parking space shall be provided for different types of development as per norms given in table 3.1

Table 3.1 Parking standards

S.No.	Land use	Parking Standards	Remark
1	Residential		
	Residential Plot-Plotted Housing	1 Equivalent Car Space (ECS) in plots of size 250-300 sqm and 1ECS for every 100 sqm. built up area, in plots exceeding 300 sqm.	--
	Residential Plot - Group Housing	1.0 ECS/100 sqm built up area	--
	Cluster Court Housing	1.0 ECS/100 sqm built up area	--
	Guest House / Lodging & Boarding House / Dharamshala	2 ECS per 100 sqm. of built up area	--
2	Commercial Centres		
	Convenience Shopping Centre/Local Shopping Centre / Local Level Commercial areas	2 ECS / 100 sqm of floor area	--
	Service Market	2 ECS / 100 sqm of floor area	--
	Community Centre / Non- hierarchical Commercial Centre	3 ECS / 100 sqm of floor area	--
	District Centre/ Sub-Central Business District/Sub-City Level Commercial areas	3 ECS / 100 sqm of floor area	--
	Commercial Plot: Retail & Commerce Metropolitan City Centre	3 ECS / 100 sqm of floor area	--
	Hotel	3 ECS / 100 sqm of floor area	For Population between 2- 10 lakh – 1 car parking space for every 4 guest room. For Population between 10-50 lakh – 1 car parking space for every 3 guest room. For Population more than 50 lakh – 1 car parking space for every 2 guest 2 room
	Service Apartments	3 ECS / 100 sqm of floor area	--
	Any other commercial centre including commercial component along with Railway/MRTS and ISBT	3 ECS / 100 sqm of floor area	--
	Integrated Freight Complex/ Wholesale Market	3 ECS / 100 sqm of floor area	In case of plots up to 300 sqm. common parking is to be provided
3	Socio-Cultural Facilities		
	Community Hall	3.0 ECS / 100 sqm of floor area	--
	Recreational Club	2 ECS / 100 sqm of floor area	--
	Socio-cultural activities such as auditorium, music, dance & drama, centre / meditation, spiritual centre etc.	2 ECS / 100 sqm of floor area	--
	Science Centre	2 ECS / 100 sqm of floor area	--

S.No.	Land use	Parking Standards	Remark
	Old Age Home / Care Centre for Physically / Mentally challenged / Working women / men hostel /Adult Education Centre / Orphanage / Children's Centre / Night Shelter	1.8 ECS / 100 sqm of floor area	--
	Sport facility for international sports Event	2 ECS / 100 sqm of floor area.	--
4	Public-Semi Public		
	Integrated Office Complex	1.8 ECS / 100 sq m of floor area	The norms for Local Government offices / Public Sector Undertakings under Government Land use shall be as per Integrated office complex
	Hospitals	2 ECS / 100 sqm. of floor area	--
	Veterinary Hospital	1.33 ECS / 100 sqm. of floor area	--
	Veterinary Dispensary	1.33 ECS / 100 sqm. of floor area	--
	Nursing and Paramedic institute	2 ECS / 100 sqm. of floor area	--
	Medical College	As per norms of Medical Council of India / Regulatory Body	--
5	Industry		
	Industrial Plot up to 50 sqm area	2 ECS / 100 sqm of floor area	--
	Industrial Plot 51sqm -400 sqm area	2 ECS / 100 sqm of floor area	--
	Industrial Plot 401 sqm and above	2 ECS / 100 sqm of floor area	--
	Flatted group Industry (Min Plot size 400 sqm)	2 ECS / 100 sqm of floor area	--
6	Mixed Land use	Parking @ 2.0 ECS / 100 sqm built up area shall be provided within the premises.	Where this is not available, cost of development of parking, shall be payable by the plot allottee / owner to the local body concerned or Multi- level parking to be provided as an option. This condition shall apply even if residential premises are used only for professional activity.

Buildings within the Residential Use Zone

Buildings for various uses/activities within the residential use zone forming part of the residential layout plan are to be constructed with the norms of the coverage, FAR, height and others as applicable to that size of a residential plot.

Residential Premises – Plotted Housing

The layout plans for residential scheme shall be formulated keeping in view:

- i) that there should be sufficient daylight and fresh air in the habitable areas within the buildings, when constructed.
- ii) that there would be protection against noise, dust and local hazards
- iii) that there should be sufficient open space for various family needs and in accordance with the provisions.
- iv) that the circulation and access is easy and is safe from accident point of view
- v) that, as far as possible, the plots are of regular shape and size and
- vi) these are logically arranged in a systematic manner so as to give a regular pattern of development in the form of row houses, detached and semi-detached houses and if necessary the regular bungalow type plots.

A plot should be built for two dwelling units on each plot. However, on bigger size plots, more than one dwelling unit per plot can be built. For low-income group, the minimum plot size will be not less than 30 sq.mt. The following Table 3.3 is for different size of the plots applicable, ground coverage, FAR, height and number of dwelling units for a residential area:

Table 3.3 Building control in Residential / Commercial Premises

Sl.No.	Plot Area (sq.mt)	Maximum Ground Coverage %	FAR	No. of DUs.	Maximum Height (mt.)
1.	30	90	150		8
2.	Above 30 upto 50	90	150		8
3.	Above 50 upto 100	75	180		12
4.	Above 100 upto 250	65	180		12
5.	Above 250 upto 500	65	165		15
6.	Above 500 upto 1000	55	120		15
7.	Above 1000 upto 1500	55	100		15
8.	Above 1500 upto 3000	40	100		15

Note:

1. In the already developed plots the pattern of development should conform to the existing regulations.
2. Basement, if constructed, may be used for incidental use such as parking, servicing and household storage. It is not to be used as a dwelling unit.
3. The area of the basement should not be more than the ground coverage.
4. Parking as per the prescribed norms should be provided with the plot or provision should be made in the layout plan without affecting the circulation pattern.
5. 50% of the open area of the plot should be used for proper landscaping and for plantation.
6. Plot upto 50 sqmt is only for BPL Card Holder.

The other Building control is as under :-

Plot Area (sq.mt)	Set – back		
	Front	Back	One side
(i) Upto 50	1.0	1.0	-
(ii) Upto 50 to 100	3.05	3.05	2.40
(iii) Upto 100 to 150	3.05	3.05	2.40
(iv) Upto 150 to 300	3.05	3.05	3.05
(v) 300 and above	3.05	3.05	3.05

The relaxation in set-back may be allowed as per decision of Board.

Group Housing

The number of dwelling units will be calculated on the basis of the density pattern given in the development plan, taking into consideration a population of 4.5 persons per dwelling unit.

Minimum size of the plot	3000 sq m.
Maximum ground coverage	35% to 45%
Maximum FAR	1.5
Maximum Height	15 m.
In hill areas	
Number of dwelling units	To be calculated on the basis of the net plot area of a particular neighborhood.

The other FAR is as under :-

Upto 100 sqmt	FAR 2.00
Upto 101 to 300 sqmt	FAR 1.75
Upto 301 to 500 sqmt	FAR 1.50

Note:

1. Basement, if constructed, is to be used for parking, services and for essential household storage and for providing facilities without counting in FAR.
2. The quantum of basement may vary between 33 % to 50% of the plot area.
3. The above FAR is not applicable in inside notified civil area.

Low Income Housing (For families holding BPL Card)

The minimum plot size shall not be less than 30 sqm.

- i) The minimum plot size with ground coverage not exceeding 90%, shall be minimum 40 sqm.
- ii) Size of room: Every dwelling unit should have at least two habitable rooms, first room of minimum 9 sqm and width of 2.5 m. Other room shall be min 6.5 sqm with minimum width of 2.1 m provided the total area of both the rooms shall not be less than 15.5 sqm.

Studio Apartments:

Minimum size of plot	2000 sqm.
Maximum Ground Coverage	33.3%
Maximum FAR	1.50
Height	15 m.
Parking	2.0 ECS/100 sqm built up area

Other controls for studio apartments:

- i. The maximum size of the apartment shall be 60 sqm built-up.
- ii. The plots shall be located on road facing minimum width of 12m.
- iii. Basement, if constructed, and used only for parking, utilities and services shall not be counted towards FAR.

Guest House, Boarding House and Lodging House, Hostel

Minimum plot size	500 sq m.
Maximum ground coverage	30%
Maximum floor area ratio	1.20
Maximum height	15 m.

Other Controls:

- i) Minimum R/W in front 20 m.
- ii) Basement upto the building envelope to the maximum extent of 50% of plot area shall be allowed and if used for parking and services should not be counted in FAR.

Dharmshala, Baratghar, and Night Shelter

Minimum plot size	10
Maximum ground coverage	30
Maximum floor area ratio	1.
Maximum height	15

Other Controls:

- i) Minimum R/W in front 16 m.
- ii) Basement upto the building envelope to the maximum extent of 50% plot area shall be allowed and if used for parking and services should not be counted in FAR.

Commercial

Convenience Shopping

Maximum ground coverage	40%
Maximum floor area ratio	0.60
Maximum Height	15 m.

Local Shopping/ Neighbourhood Shopping Centre

Maximum ground coverage	40%
Maximum FAR	1.20
Maximum Height	15 m.

Community Centre

Maximum ground coverage	40%
Maximum FAR	1.20
Maximum Height	15 m.

District Centre

Maximum ground coverage	25%
Maximum FAR	1.25
Maximum Height	15m.

Central Business District/ City Centre

Maximum ground coverage	40%
Maximum floor area ratio	1.5
Maximum height	15m.

Informal Bazaar/market

Maximum ground coverage	50%
Maximum floor area ratio	0.40
Maximum Height	8m

Petrol Pumps

The following regulations are recommended for locating the petrol pump cum service stations-

- i) Minimum distance from the road intersections.
 - a) For minor roads having less than 30 m. R/W 50 m.
 - b) For major roads having R/W 30 m. or more 100 m.
- ii) The minimum distance of the property line of pump from the center line of the Road should not be less than 15 meters on roads having less than 30 m. R/W. In case of roads having 30 m. or more R/W, the R/W of the road should be protected.
- iii) Plot Size
 - a) Only filling stations 30 m. x 17 m. and small size 18 m. x 15 m. (for two and three wheelers)
 - b) Filling-cum-service station minimum size 36 m. x 30 m. and maximum 45m. x 33 m.
 - c) Frontage of the plot should not be less than 30 m.
 - d) Longer side of the plot should be the frontage.
- iv) New Petrol Pump shall not be located on roads having less than 30 m. R/W.

Other Controls:

- a) *Filling-cum-service station size 36 m. x 30 m. and 45 m. x 33 m.)*
 - i) *Ground coverage* 20%
 - ii) *FAR* 0.20
 - iii) *Max. Height* 6 m.
 - iv) *Canopy* Equivalent to permissible ground coverage within setback line.
 - v) *Front Setback* Min. 6 m.
- b) *Filling Station (size 30 mt. x 17 mt. and 18 mt. x 15 mt.)*
 - i) *Ground coverage* 10%
 - ii) *FAR* 0.10
 - iii) *Max. Height* 6 m.
 - iv) *Canopy* Equivalent to permissible ground coverage within setback line.
 - v) *Front Setback* Min. 3 m.
- c) *Other Regulations*
 - i) *Shall be approved by Explosives/Fire Deptt.*
 - ii) *Ground coverage will exclude canopy area.*
 - iii) *Mezzanine if provided will be counted in FAR*
 - iv) *Wherever the plot is more than 33 m. x 45 m. development norms shall be restricted to as applicable to the size i.e. 33 m. x 45 m. both in urban and rural areas.*
- d) *Compressed Natural Gas (CNG) Mother Station*
 - i) *Plot Size (Max.)* 36 m. x 30 m.
 - ii) *Maximum ground coverage* 20%
 - iii) *Maximum Height* 4.5 m. (single storey)
 - iv) *Building Component* Control room/office/Dispensing room, store, pantry and W.C.

Hotels

Maximum ground coverage	40%
Maximum floor area ratio	1.50
Maximum height	15m.

Other Controls:

- i) *5% of the FAR can be used the commercial space related to hotel function.*
- ii) *Basement(s) up to the building envelope to the maximum extent of plot area shall be allowed and if used for parking and services should not be counted in FAR.*

Health Services

Table 3.8 Development Controls on Health Centers and Nursing Homes

Sl. No	Category	Maximum			Other Controls						
		Ground Coverage	FAR	Height							
1.	Hospital/*Tertiary Health care Centre	*Ground coverage to be decided by interse building to building distances as per Building Bye Laws and fire tender movement requirements, subject to a maximum 40% excluding 5% additional ground coverage for muti-level parking Minimum plot area 6000 sq.m.	*FAR on plot facing ROW should be subject to NOC from all concerned agencies depending on locations shall be as under: <table border="1" data-bbox="768 978 954 1241"> <tr> <td>a. Row less than 24m</td> <td>2.50</td> </tr> <tr> <td>b. Row 24m up to 30m</td> <td>3.00</td> </tr> <tr> <td>c. Row 30m and above</td> <td>3.75</td> </tr> </table>	a. Row less than 24m	2.50	b. Row 24m up to 30m	3.00	c. Row 30m and above	3.75	*No height restriction subject to clearance from AAI, FS, DMA, NMA. NBC to process the proposed revision of NBC as soon as possible. Till date the time the NBC is revised, fire services may allow no restriction of height for health care facilities with commensurate fire and life safety measures, subject to clearance from AAI, FS, DMA, NMA and other statutory provisions	<p>1. *Upto 25% of the permitted FAR can be utilized for residential use for essential staff, dormitory/hostel for attendents of the patients, Creche etc.</p> <p>2. *Parking standard @ 2.0 ECS/100 sqm of floor area.</p> <p>3. *Maximum 10% ground coverage shall be allowed for providing atrium. In case, the permissible additional ground coverage for atrium is utilized, 25% of the utilized ground coverage shall be counted toward FAR</p> <p>4. *Multi Level Podium parking shall be permissible to the extent of building envelope lines, free from FAR and ground coverage to facilitate ample parking in spaces, subject to structural safety.</p> <p>5. *Common areas such as waiting halls, reception and fire stairs cases shall be allowed free from FAR</p> <p>6. *Service floor of height 1.8m shall not be counted in FAR Parking Standard @ 2.0 ECS/100 sq.mt. of floor area.</p>
a. Row less than 24m	2.50										
b. Row 24m up to 30m	3.00										
c. Row 30m and above	3.75										
2.	Other Health Facilities a. Maternity Home Nursing Home/ Polyclinic / Dispensary i) Family Welfare Centre ii) Pediatric Centre Geriatric Centre Diagnostic Centre.	30%	1.50	26 mt.	Parking Standard @ 2.0 ECS/100 sq.mt. of floor area.						
3.	a. Veterinary Hospital for pet animals and birds. b. Dispensary for pet animals and birds.	30% 35%	1.50 1.00	26 mt. 26 mt.	Parking standard @ 1.33 ECS / 100 sq. mt. of floor area. Parking standard @ 1.33 ECS / 100 sq. mt. of floor area.						
4.	a. Medical College	As per norms of Medical Council of India / Regulatory Body									
	b. Nursing and Paramedic Institute	30%	1.50	26 mt.	Parking Standard @ 2.0 ECS/100 sq.mt. of floor area.						
	c. Veterinary Institute	As per the Veterinary Council of India/Ministry norms.									

*^ Natural sky light condition is exempted for Atrium and construction over the Atrium may be allowed.

*# Height restriction of 30 mts. In Hospital Buildings should be reviewed in consultation with Fire Deptt. of State Govt.

Notes:

1. Plot area for all *Hospital/Tertiary Health Care Centre would be worked out @ 80 sq.mt. of gross floor area per bed. However, for other health facilities like Maternity/Nursing homes, family Welfare and other centers, the plot area would be worked out @ 60 sq.mt. of gross floor area per bed.
2. Maximum up to 300 sq. mt. of floor area shall be allowed to be used for community space / religious shrine / crèche / chemist shop/ bank counter on Hospital sites and also Medical College/Nursing and Paramedic institutes sites.

Other Controls:

- a. In case of super specialty medical facilities/hospitals duly certified as such by the competent authority, the gross area shall be worked out @ upto 125 sq. mt. per bed.
- b. In case of existing premises/sites, the enhanced FAR shall be permitted, subject to payment of charges as may be prescribed by the Authority / land owning agency and other clearances.
- c. *Basement after utilization for Parking; Services Requirements such as air conditioning plant and equipment, water storage, boiler, electric sub-station, HT & LT panel rooms, transformer compartment, control room, pump house, generator room; staff locker room, staff changing room, staff dining facilities without kitchen facility, Central sterile supply dept., back end office; Other Mechanical Services; Installation of Electrical and fire fighting equipment's; and other services like kitchen, laundry and radiology lab and other essential services required for the maintenance/functioning of the building may be used for healthcare facilities with prior approval of the concerned agencies.
- d. Other controls related to basements etc. are given in end of this chapter.
- e. *The bed count of a Health Facility may be allowed as per permissible FAR, needs of the Community and demand studies.
- f. *Environment clearances shall be made mandatory considering that bio-wastes are generated. Environment clearances are mandatory as per the prevailing regulations related to the environment.
- g. *Zero discharge for sewerage shall be enforced at the cost of the promoters and post treatment water can be used by premises for its needs of horticulture, flushing, coolant tower, washing or disposal to other construction sites. These issues concerned the local bodies and can be dealt accordingly as per existing regulations as the time of sanctioning the plan.
- h. The additional power requirements shall be met by power supply from grid and till such time by means of suitable captive generation.

Educational Facilities

Nursery School

Maximum ground coverage	40%
Maximum floor area ratio	1.00
Maximum height	8 m.

Note: Basement below the ground floor and to the maximum extent of ground coverage, and if constructed shall be counted in FAR.

Primary School

Maximum ground coverage	40%
Maximum floor area ratio	1.20
Maximum height	15 m.

Higher Secondary School

Maximum ground coverage	40%
Maximum floor area ratio	1.50
Maximum height	15 m.

College

Maximum ground coverage	35%
Maximum floor area ratio	1.50
Maximum height	15 m.

Note:

- In case of the above premises the total area of the plot shall be divided in
 - School/college building area
 - Play field area
 - Parking area
 - Residential and hostel area
- The maximum ground coverage and FAR shall be calculated only on the areas meant for building.

Table 3.9 Development Controls for Other Education Facilities

Sl. No	Category	Maximum		
		Ground Coverage	FAR	Height
1.	Play School, Coaching Centre, Computer Training Institute, Physical Education Centre etc.	N.A.	N.A.	N.A.
2	School for Mentally Challenged.	50%	1.20	18 mt.
3	School for *differently abled persons.	50 %	1.20	18 mt

Notes:

Pre-Primary Schools/Nursery Schools/Montessori Schools/Creche, Play Schools, may be permissible in residential use premises as per Mixed use policy.

Other Controls:

- In case of new schools, the front boundary wall shall be recessed by 6 mt. to accommodate visitors parking within setback area.
- Playground shall be developed on pool basis in different areas at neighborhood level.
- Practice of providing dedicated Nursery School plots in the layout plan discontinued as same is permissible in Mixed use.
- In case of schools for mentally / *differently abled persons, 20% of the maximum Far can be utilized for residential use of essential staff and student accommodation.

Professional activity

Professional activity shall be allowed in residential plot and flats on any floor on the following condition:

Part of the premises shall be permitted to be used upto a maximum of 25 % of FAR or 100sqm. whichever is less, for non-residential but non-nuisance activities for rendering service based on professional skills.

Table 3.14 Development Control for Distributive Services

Sl.No	Category	Maximum			Other Controls
		Ground Coverage	FAR	Height	
1.	Milk booth/Milk and fruit & vegetable booth	Permitted in all zones as per approved layout plan.			
2.	LPG godown including booking office.	i. Plot size- upto 600sqm including booking office and security hut. ii. Permitted in all use zones except in residential and recreational use zones subject to statutory clearances.			
3.	SKO/ LDO outlets	i. Permitted in all use zones except in residential and recreational use zones subject to statutory clearances.			

Socio – cultural facilities**Table 3.15 Development Controls for Socio- Cultural Facilities**

Sl.No	Category	Maximum			Other Controls
		Ground Coverage	FAR	Height	
1.	a. Multipurpose Community Hall.	40%	1.20	15m	1. Parking standard @3.0ECS/100sq m of floor area. 2. Other controls related to basements etc. are given at end of this chapter.
	b. Banquet hall	40%	1.20	15m	
2.	a. Community Recreational Club.	40%	1.20	15m	Parking standard @2ECS/100sq.m of floor area.
	b. Recreational Club	30%			
3.	Socio- cultural activities such as auditorium, music, dance & drama centre/mediation & spiritual centre etc.	40%	1.20	15m	1. Parking standard @ 2ECS/100sq.m of floor area. 2. A proper scheme for visitors parking and parking adequacy statement shall be prepared taking into consideration large number of visitors.
4.	Exhibition cum Fair Ground	20%	0.20	15m	Subject to statutory clearances.
5.	Science centre	30%	1.20	NR,	Parking standard @2ECS.

Notes:

- i. In case of community recreational clubs, 0.50 FAR shall be admissible on the area beyond 2000 sqm.*
- ii. In the open area apart from outdoor games/sport facilities, swimming pool would be permissible upto an area of 300sqm. Free from ground coverage.*
- iii. Basement within the ground envelope shall be allowed for parking, stilt floor for parking is permissible.*
- iv. 30% of basement area for services, storage shall not be counted in FAR.*

Other community facilities:

Development Controls for old age homes, religious facilities, etc shall be as follows:

Table 3.16 Development Controls for other community facilities

Sl.No	Category	Maximum			Other Controls
		Ground Coverage	FAR	Height	
1	Old Age Home/Care Centre for *Differently Abled Persons /Mentally Challenged/Working Women/Men Hostel/ Adult Education Centre/Orphanage/Children's Centre/Night Shelter.	30%	1.20	15m.	1. Parking standard@ 1.8 ECS/100 sqm of floor area. 2. Other controls related to basement etc. are as given in Chapter 17,Development Code , MPD - 2021
2.	Religious a) At neighbourhood level b) At sub city level in urban extension*	35% 25%	0.70 0.50	15m. including shikhara 26m.	
3.	Anganwari c) At Housing area/Cluster level	30%	0.60	15m.	

These facilities should be developed in a composite manner to accommodate a number of religious institutes/premises with common facilities.

Note: - sites of dhobi Ghats/laundry shall be provided in residential use zone/PSP facilities areas as per the norms of local body.

Creche/Day Care facilities

As per factories Act, 1948 a Creche/Day care facility has to be provided for any organization/establishment employing more than 15 women for their kids upto the age of 5.

- The height of the rooms shall be not less than 3.6 metres from the floor to soffit and there shall not be less than 1.86 sqm of floor area / child to be accommodated and maintaining adequate ventilation by the circulation of fresh air.
- There is a minimum of one toilet and one wash hand basin for every 10 children over the age of two years. (refer notes under Table 4.21)
- The minimum staffing ratios for care shall be 1:4 children
- Monitoring- There is a necessity of minimum two supervisor on continuous duty.

4. GENERAL BUILDING REQUIREMENTS AND SERVICES

General

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

Table 4.1 Occupant Load

Sl.No.	Type of Occupancy	Occupant Load per 100 sq m. of Plinth or Covered Area
1	Residential	8.0
2	Educational	25.0
3	Institutional	6.60
4	Assembly with fixed or loose seats and dance floor without seating facilities including dining rooms	166.6
		66.6
5	Mercantile street floor and sales basement upper sale floor	33.3
		16.6
6	Business and industrial	10.0
7	Storage	3.3
8	Hazardous	10.0

* The occupant load in dormitory portions of homes for the aged, orphanages or mental hospitals etc. where sleeping accommodation is provided shall be calculated at not less than 13.3 persons per 100 sq.m.

** The plinth or covered area shall include, in addition to the main assembly room or space, any occupied connecting room or space in the same storey or in the storeys above or below where entrance is common to such rooms and space and the area available for use by the occupants of the assembly place. No deduction shall be made in the plinth/covered area for corridors, closets and other sub-divisions; that area shall include all space serving the particular assembly occupancy.

Requirements for Parts of Buildings

Plinth

Main Buildings

The plinth or any part of a building or outhouse shall be so located with respect to the surrounding ground level that adequate drainage of the site is assured. The height of the plinth shall be not less than 450 mm from the surrounding ground level.

Interior Courtyards and Covered Parking

Every interior courtyard shall be raised at least 150 mm above the determining ground level and shall be satisfactorily drained.

Habitable Rooms

Height

The height of all rooms for human habitation shall not be less than 2.75 m measured from the surface of the floor to the lowest point of the ceiling (bottom of slab) provided that the minimum clear headway under any beam shall not be less than 2.4 m. In the case of pitched roof, the average height of rooms shall not be less than 2.75 m. The minimum clear head room under a beam, folded plates or eaves shall be 2.4 m. In the case of air-conditioned rooms, a height of not less than 2.4 m measured from the

surface of the floor to the lowest point of air-conditioning duct or the false ceiling shall be provided.

The requirements of clause 4.3.1 apply to residential, business and mercantile buildings. For educational and industrial buildings, the following minimum requirements apply:

Table 4.2 Minimum height requirement for educational and industrial buildings

Sl.No	Types of building	Ceiling height
1	Educational Buildings	Ceiling height 3.6 m for all regions
2	Industrial Buildings	Ceiling height 3.6 m, except when air-conditioned, 3 m (<i>Factory Act 1948</i> and Rules therein shall govern such heights, where applicable).

Size

The area of habitable room shall not be less than 9.5 m², where there is only one room with a minimum width of 2.4 m. Where there are two rooms, one of these shall not be less than 9.5 m² and the other not less than 7.5 m², with a minimum width of 2.1 m.

Kitchen

Height

The height of a kitchen measured from the surface of the floor to the lowest point in the ceiling (bottom of slab) shall not be less than 2.75 m, except for the portion to accommodate floor trap of the upper floor.

Other Requirements

Every room to be used as kitchen shall have:

- a) unless separately provided in a pantry, means for the washing of kitchen utensils which shall lead directly or through a sink to a grated and trapped connection to the waste pipe;
- b) an impermeable floor;
- c) a flue, if found necessary; and
- d) a window or ventilator or opening.

Bathrooms and Water-Closets

Height

The height of a bathroom or water-closet measured from the surface of the floor to the lowest point in the ceiling (bottom of slab) shall not be less than 2.1 m.

Size

The area of a bathroom shall not be less than 1.8 m² with a minimum width of 1.2 m. The floor area of water-closet shall be 1.1 m² with a minimum width of 0.9 m. If bath and water-closet are combined, its floor area shall not be less than 2.8 m² with a minimum width of 1.2 m.

Other Requirements

Every bathroom or water-closet shall:

- a) be so situated that at least one of its walls shall open to external air;
- b) not be directly over or under any room other than another water-closet, washing place, bath or terrace, unless it has a water-tight floor;
- c) have the platform or seat made of water-tight non-absorbent material;
- d) be enclosed by walls or partitions and the surface of every such wall or partition shall be finished with a smooth impervious material to a height of not less than 1 m above the floor of such a room;
- e) be provided with an impervious floor covering, sloping towards the drain with a suitable grade and not towards VERANDAH or any other room; and
- f) have a window or ventilator, opening to a shaft or open space, of area not less than 0.3 m^2 with side not less than 0.3 m.

4.5.4 No room containing water-closets shall be used for any purpose except as a lavatory and no such room shall open directly into any kitchen or cooking space by a door, window or other opening. Every room containing water-closet shall have a door completely closing the entrance to it.

Store Room

Height

The height of a store room shall be not less than 2.2 m.

Size

The size of a store room, where provided in a residential building, shall be not less than 3 m^2 .

Garage

Height

The height of a garage shall be not less than 2.4 m.

Size

The size of garages shall be as below:

- a) Private Garage - $3.0 \text{ m} \times 6.0 \text{ m}$, minimum; and
- b) Public Garage - Based on the number of vehicles parked by ECU.

Basement

The basement shall not be used for residential purposes.

The construction of the basement shall be allowed by the Authority in accordance with the land use and other provisions specified under the Development Control Rules.

The basement to be constructed within the building envelope and subject to maximum coverage on floor 1 (entrance floor) may be put to only the following uses:

- a) Storage of household or other goods of ordinarily non-combustible material;
- b) Strong rooms, bank cellars, etc;
- c) Air-conditioning equipment and other machines used for services and utilities of the building; and
- d) Parking spaces.

The basement shall have the following requirements:

- a) Every basement shall be in every part at least 2.4 m in height from the floor to the underside of the roof slab or ceiling;
- b) Adequate ventilation shall be provided for the basement. The ventilation requirements shall be the same as required by the particular occupancy according to byelaws. Any deficiency may be met by providing adequate mechanical ventilation in the form of blowers, exhaust fans, air-conditioning systems, etc;
- c) The minimum height of the ceiling of any basement shall be 0.9m and the maximum, 1.2 m above the average surrounding ground level;
- d) Adequate arrangements shall be made such that surface drainage does not enter the basement;
- e) The walls and floors of the basement shall be watertight and be so designed that the effects of the surrounding soil and moisture, if any, are taken into account in design and adequate damp proofing treatment is given; and
- f) The access to the basement shall be separate from the main and alternative staircase providing access and exit from higher floors.
- g) Where the staircase is continuous in the case of buildings served by more than one staircase, the same shall be of enclosed type serving as a fire separation from the basement floor and higher floors. Open ramps shall be permitted if they are constructed within the building line subject to the provision of (d). The exist requirements in basements shall comply with the provisions of Part 4 'Fire and Life Safety'

Chimneys

The chimneys shall be built at least 0.9 m above flat roofs, provided the top of the chimneys is not below the top of the adjacent parapet wall. In the case of sloping roofs, the chimney top shall not be less than 0.6 m above the ridge of the roof in which the chimney penetrates.

Parapet

Parapet walls and handrails provided on the edges of roof terraces, balcony, verandah, etc shall not be less than 1.0 m and not more than 1.2 m in height from the finished floor level.

Note:

- i. *The above shall not apply where roof terrace is not accessible by a staircase.*
- ii. *However on terrace floor in the portion where installations like DG Set, Water Tank and other, screening parapet of a suitable height may be constructed to hide such equipment's etc and there is no need to have uniformly increased the height of the parapet.*

Cabin

The size of cabins shall not be less than 3.0 m² with a minimum width of 1.0 m. The clear passages within the divided space of any floor shall not be less than 0.75 m and the distance from the farthest space in a cabin to any exit shall not be more than 18.5m. In case the sub-divided cabin does not derive direct lighting and ventilation from any open spaces/ mechanical means, the maximum height of the cabin shall be 2.2 m.

Septic Tanks

Where a septic tank is used for sewage disposal, the location, design and construction of septic tank shall conform to requirements of Part 9 'Plumbing Services, Section 1 Water Supply, Drainage and Sanitation (Including Solid Waste Management)' of NBC, 2005.

Location of the Septic Tanks and Subsurface Absorption Systems

A sub-soil dispersion system shall not be closer than 18 m from any source of drinking water, such as well, to mitigate the possibility of bacterial pollution of subsurface water. It shall also be as far removed from the nearest habitable building as economically feasible but not closer than 6 m, to avoid damage to the structures.

Requirements

- a) *Dimensions of septic tanks* - Septic tanks shall have a minimum width of 750 mm, a minimum depth of 1 m below the water level and a minimum liquid capacity of 1 m³. The length of tanks shall be 2 to 4 times the width;
- b) Septic tanks may be constructed of brickwork, stone masonry, concrete or other suitable materials as approved by the Authority;
- c) Under no circumstances shall effluent from a septic tank be allowed into an open channel drain or body of water without adequate treatment;

Office-cum-Letter Box Room

In the case of multi-storeyed multi-family dwelling apartments constructed by existing and proposed Cooperative Housing Societies or Apartment Owners Associations, limited companies and proposed societies, an office-cum-letter box room of dimension 3.6 m × 3 m shall be provided on the ground floor. In case the number of flats is more than 20, the maximum size of the office-cum-letter box room shall be 20 m².

Business Buildings

Provision shall be made for letter boxes on the entrance floor as per the requirements of the postal department.

4.17.5 Exit Requirements

All aspects of exit requirements for corridors, doors, stair cases, ramps, etc in respect of widths, travel distance shall be as per Part 4 'Fire and Life Safety' of NBC,2005.

Roofs

The roof of a building shall be so designed and constructed as to effectively drain water by means of sufficient rain-water pipes of adequate size, wherever required, so arranged, jointed and fixed as to ensure that the rain-water is carried away from the building without causing dampness in any part of the walls, roof or foundations of the building or an adjacent building.

Other general requirements

Swimming Pool

- 1) *Definition*: A constructed pool or a tank indoor or outside the building, used for the purpose of swimming, bathing, aquatic sports or games, training, treatment (Therapy) or recreation, meant exclusively for human being, having a depth of water not less than that 60 cm. and the surface area exceeding 23.25 sq m. both for the use of public or the institution concerned.
 - i) *“Capacity of Pools in Relation to Bathers”*: The maximum number of persons in bathing attire within the pool enclosures of the bathing area shall not exceed one person per 20 sq ft. (1.86 sq m.) of pool i.e. the area of the water surface.
- 2) *“Hand Rail”*: A side handrail extending up above and returning to the horizontal surface of the pool deck curb or coping shall be provided at each side of each ladder.
- 3) *“Depth Markers”*: Depth of water shall be clearly marked at or above the water surface on the vertical pool wall and on the edge of the deck or walk-way next to the pool, at maximum points and at the points of break between the deep and shallow portions and at intermediate increments of depth, spaced at not more than 2.5” (7.62 cm) intervals. Depth markers, contrasting with background shall be on both sides of the pool.
- 4) *“Lighting and Wiring”*: Where submarine lightning is used, not less than 0.5 watts shall be employed per sq. ft. of pool area.
- 5) *“Area Lightning”*: Where submarine lightning is employed, area lightning shall be provided for the deck areas and directed towards the deck areas and away from the pool surface so far as practicable, in a total capacity of not less than 0.6 watt per sq. ft of deck area.

Where submarine lighting is not provided and night swimming is not permitted combined pool lightning shall be provided in an amount of not less than 2 watts per sq. ft. of total area. All submarine lightning shall be individually earthed and must be water tight and damp proof.
- 6) *“Over Head Wiring”*: No electrical wiring for electrical or power shall be permitted to pass over within 20 feet of the pool enclosure.
- 7) *“Shallow Minimum Depth”*: Every swimming pool shall have a minimum depth in the shallow area of the main swimming area of not less then 0.9 mt. (3 feet), but not more than 1.07mt. (3'-6") from the overflow level to the floor
- 8) *“Shallow Areas”*: In a swimming pool with a diving area, the shallow area of the pool shall be defined as the portion between the shallow end and the break point between the shallow area and the diving area. The slope of the floor shall be uniform from the break point between the diving area and the shallow portion to the outside edge of the shallow portion and shall not be greater than 1 in 2 m.
- 9) *“Vertical Wall Depth”*: The pool walls shall be vertical at all points for a depth of not less than 2 ft 6" (0. 76 m.)

Means of access

No Building shall be erected as to deprive any other building of its means of access.

Every person who erects a building shall not at any time erect or cause or permit to erect or re- erect any building, which in any way encroaches upon or diminishes the area set apart as means of access.

5. PROVISIONS FOR DIFFERENTLY-ABLED, ELDERLY AND CHILDREN

Applicability

These regulations shall be applicable to all buildings and facilities used by the public such as educational, institutional, assembly, commercial, business, mercantile buildings and group housing constructed on plots having an area of more than 2000 sq.m. It shall not apply to private residential buildings.

Guidelines and Provisions

Provisions in the following guidelines shall apply:

1. “*Guidelines and Space Standards for Barrier Free Built Environment for Disabled and Elderly Persons*”, (1998), Central Public Works Department, GoI ⁵
2. “*Manual on Barrier Free Environment*”, (2002), O/o the Chief Commissioner for Persons with Disabilities, Ministry of Urban Development, GoI.
3. “*National Building Code*”, (2005), Bureau of Indian Standards,
4. “*National Policy for Persons with Disabilities*”, (2006), Ministry of Social Justice and Empowerment, GoI.
5. “*Harmonized Guidelines and Space Standards for Barrier Free Built Environment for Persons with Disabilities and Elderly Persons*”, (Draft 2014), Ministry of urban Development, GoI.⁶

Types of buildings to adopt barrier free guidelines as notified by the State Government

Buildings to be designed for Ambulant Disabled People

Higher Secondary School, Conference Hall, Dance Halls, Youth Centers, Youth Clubs, Sport Centers, Sport Pavilions, Boat Club Houses, Ice Rinks, Bowling Centers, Swimming Pools, Police Stations, Law Courts, Courts Houses, Sport Stadiums, Theaters, Concert Halls, Cinemas, Auditoria, Small Offices (the maximum plinth area 1400 sq.mt) Snack Bars, Cafes and banqueting rooms (for capacity above 50 dinners).

Note:

- a. In sport stadiums provisions shall be made for non-ambulant spectators (small wheel chair)
- b. @ 1:1000 up to 10,000 spectators and @ 1:2000 for spectators above 10,000.
- c. In Theaters, Concert Halls, Cinemas and Auditoria provisions shall be made for non-ambulant spectators (Small Wheel Chairs) @ 1/250 up to 1000 spectators and 1/500 for spectators above 1000.

Buildings to be designed for Non-Ambulant Disabled People

Schools for differently abled and other buildings as mentioned in Sec 16, Chapter 1 and along with Botanical Gardens, Religious Buildings, Elderly People Clubs, Village Halls, Day Centers, Junior Training Centers, Post Offices, Banks, Dispensaries, Railway Stations, Shops, Super Markets, and Departmental Stores.

Note: Large wheel chair criteria shall be applicable on ground floors of the following building, post offices, banks, dispensaries, railway station, shops, supermarkets, and departmental stores.

Buildings to be designed for Non-Ambulant People (using small wheel chairs)

Public lavatories in Tourist Sports, Clubs Motels, Professional and Scientific Institution, Museum, Art Galleries, Public Libraries, Laborites, Universities, College for further Education, Teachers Training Colleges, Technical College, Exhibition Halls Dentist Surgeries, Administrative Department of the Hospitals, Service Stations, Car Parking, Buildings Airports Terminals, Bus Terminals, Factories Employing differently-abled for sedentary works, Large Offices, (with plinth area abode 1400 sq.mt.), Tax Offices, Passport Offices, Pension Offices, and Labour Offices, Cafes, Banqueting Rooms and Snack Bars (For capacity above 100 dinners).

Site development

Level of the roads, access paths and parking areas shall be described in the plan along with specification of the materials.

Access Path / Walk Way

Access path from plot entry and surface parking to building entrance shall be minimum of 1800 mm wide having even surface without any steps. Slope, if any, shall not have gradient greater than 5%. Selection of floor material shall be made suitably to attract or to guide visually impaired persons (limited to coloured floor material whose colour and brightness is conspicuously different from that of the surrounding floor material or the material that emits different sound to guide visually impaired persons; hereinafter referred "o as "guiding floor material". Finishes shall have a non- slip surface with a texture traversable by a wheel chair. Kerbs wherever provided should blend to a common level.

Parking

For parking of vehicles of differently-abled people, the following provisions shall apply:

- a) Surface parking for two car spaces shall be provided near entrance for the physically differently-abled persons with maximum travel distance of 30.0 m. from building entrance.
- b) The width of parking bay shall be minimum 3.6 meter.
- c) The information stating that the space is reserved for wheel chair users shall be conspicuously displayed.
- d) Guiding floor materials shall be provided or a device, which guides visually impaired persons with audible signals, or other devices, which serves the same purpose, shall be provided.

Building requirements

The specified facilities in buildings for differently abled persons shall be as follows:

Approach to plinth level

Every building should have at least one entrance accessible to the differently abled and shall be indicated by proper signage. This entrance shall be approached through a ramp together with the stepped entry.

- a. **Ramped Approach:** Ramp shall be finished with non-slip material to enter the building. Minimum width of ramp shall be 1800mm with maximum gradient 1:12. Length of ramp shall not exceed 9.0 meter having 800mm high hand rail on both sides extending 300mm beyond top and bottom of the ramp. Minimum gap from the adjacent wall to the hand rail shall be 50mm.
- b. **Stepped Approach:** For stepped approach size of tread shall not be less than 300mm and maximum riser shall be 150mm. Provision of 800mm high hand rail on both sides of the stepped approach similar to the ramped approach.
- c. **Exit/Entrance Door:** Minimum & clear opening of the entrance door shall be 900mm and it shall not be provided with a step that obstructs the passage of a wheel chair user. Threshold shall not be raised more than 12mm.
- d. **Entrance Landing:** Entrance landing shall be provided adjacent to ramp with the minimum dimension 1800mm x 2000mm. The entrance landing that adjoins the top end of a slope shall be provided with floor materials to attract the attention of visually impaired person's (limited to coloured floor material whose colour and brightness is conspicuously different from that of the surrounding floor material or the material that emits different sound to guide visually impaired persons. Finishes shall have a non-slip surface with a texture traversable by a wheel chair. Kerbs wherever provided should blend to a common level.

Corridor connecting the entrance/ exit for the differently abled

The corridor connecting the entrance / exit for differently abled leading directly outdoors to a place where information concerning the overall use of the specified building can be provided to visually impaired persons either by a person or by signs, shall be provided as follows:

- a) Guiding floor materials' shall be provided or device that emits sound to guide visually impaired persons.
- b) The minimum width shall be 1500mm.
- c) In case there is a difference of level, slope ways shall be provided with a slope of 1:12.
- d) Handrails shall be provided for ramps/slope ways.

Stair-ways

One of the stair-ways - near the entrance / exit for the differently abled shall have the following provisions:

- a) The minimum width shall be 1350 mm.

- b) Height of the riser shall not be more than 150 mm and width of the tread 300mm. The steps shall not have abrupt (square) nosing.
- c) Maximum number of risers on a flight shall be limited to 12.
- d) Handrails shall be provided on both sides and shall extend 300 mm on the top and bottom of each flight of steps.

Lifts

Wherever lift is required as per bye-laws, provision of at least one lift shall be made for the wheel chair user with the following cage dimensions of lift recommended for passenger lift of 13 person's capacity of NBC 2005, BIS. Section 4.9.3 Table no1- Desirable Lift size

Clear internal width 1100 mm

Clear internal depth 2000 mm

Entrance door width 900 mm

- a) A hand rail not less than 600mm long at 1000mm above floor level shall be fixed adjacent to the control panel.
- b) The lift lobby shall be of an inside measurement of 1800 mm x 2000 mm or more.
- c) The time of an automatically closing door should be minimum 5 seconds and the closing speed should not exceed 0.25 m/ sec.
- d) The interior of the cage shall be provided with a device that audibly indicates the floor, the cage has reached indicates that the door of the cage of entrance/exit is either open or closed.
- e) Graphic/Braille signage, as per the Harmonized Guidelines, shall be provided in the lift lobby.

Toilets

One special W.C. in a set of toilets shall be provided for the use of differently abled with essential provision of washbasin near the entrance for the differently abled.

- a) The minimum size shall be 1500 mm x 1750 mm.
- b) Minimum clear opening of the door shall be 900mm and the door shall swing out.
- c) Suitable arrangement of vertical/horizontal handrails with 50mm clearance from wall shall be made in the toilet.
- d) The W.C. seat shall be 500mm from the floor.

Provision of W.Cs in buildings without lift:

Provision of special W.C. shall be made on all floors for buildings designed for ambulant disabled persons. For buildings designed for non-ambulant disabled special W.C. shall be provided at Ground Floor. Size of W.C. shall depend on the type of wheel chair used by the disabled.

Provisions of W.Cs in buildings with lift

Provision of Special W.C. shall be made on all floors. Size will depend on the category of disabled for whom it has been provided.

Toilet Details: For Toilets Designed for Ambulant Disabled

- a) The minimum size of W.C. shall be 1075 x 1650 mm with a minimum depth of 1450 mm from entry door 900 mm.

- b) Long handrail on the side closer to W.C. with a clear width between the handrails shall be 900 mm and height of handrails shall be 800 mm from floor level.
- c) Minimum size of the clear door opening shall be 780 mm.

For Toilets Designed for Non-Ambulant Disabled Small Wheel Chair:

The minimum size of W.C. shall be 1350 x 1500 mm with a minimum depth of 1500 mm from entry door. 900 mm long handrail on the side closer to W.C. shall be provided. To provide movement space for wheel chair, W.C. seat shall be fixed towards one side to the opposite adjacent wall. The centerline of W.C. from the adjacent wall shall be 400 mm and minimum 950 mm from the other wall. Minimum size of the clear door opening shall be 780 mm.

For Toilets Designed for Non-Ambulant Disabled Using Large Wheel Chair:

The minimum size of W.C. shall be 1500 X 1750 mm with a minimum depth of 1750 mm for entry door. 900 mm long handrail on the side wall closer to W.C. shall be provided. To provide movement space for wheel chair, W.C. seat shall be fixed towards one side of the opposite wall. The centerline of the W.C. from the adjacent wall shall be 400 mm and a minimum of 1100 mm from the other wall. Min. size of clear door opening shall be 860 mm.

Designing for Children

In the buildings meant for the pre-dominant use of the children, it will be necessary to suitably alter the height of the handrail and other fittings & fixtures etc.

Note: Guiding / Warning Floor Material: The floor material to guide or to warn the visually impaired persons with a change of colour or material texture and easily distinguishable from the rest of the surrounding floor materials. The material with different texture gives audible signals with sensory warning when a person moves on this surface with walking stick. The guiding/warning floor material is meant to give the directional effect or warn a person at critical places. It should be provided in the following areas:

- a. The access path to the building and to the parking area.
- b. The landing lobby towards the information board, reception, lifts, staircases and toilets
- c. Immediately at the beginning/end of walkway where there is a vehicular traffic.
- d. At the location abruptly changing in level or beginning/end of a ramp.
- e. Immediately in front of an entrance/exit and the landing.

Drinking Water:

Suitable provision of drinking water shall be made for the differently abled near the special toilet provided for them.

Refuge

An alternative to immediate evacuation of a building via staircases and/ or lifts is the movement of disabled persons to areas of safety within a building. If possible, they could remain there until the fire is controlled and extinguished or until rescued by the fire fighters.

- a) It is useful to have the provisions of a refuge area, usually at the fire protected stair landing on each floor that can safely hold one or two wheelchairs.
- b) Hand Doorways with clear opening width of 900 mm and regular compliance
- c) Have an alarm switch installed between 900 mm and 1200 mm from floor level.

Proper signage

- a) Appropriate identification of specific facilities within a building for the differently abled persons should be done with proper signals.
- b) Visually impaired persons make use of other senses such as hearing and touch to compensate for the lack of vision, whereas visual signals benefit those with hearing disabilities. Signs should be designed and located so that they are easily legible by using suitable letter size (not less than 20 mm high).
- c) For visually impaired persons, information board in brail should be installed on the wall at a suitable height and it should be possible to approach them closely.
- d) To ensure safe walking, there should not be any protruding sign which creates obstruction in walking.
- e) Public Address System may also be provided in busy public areas.
- f) The symbols/information should be in contrasting colour and properly illuminated because people with limited vision may be able to differentiate amongst primary colours.
- g) International Symbol Mark for wheel chair be installed in a lift, toilet, staircase, parking areas, etc., that have been provided for the differently abled.

6. RAINWATER HARVESTING

The RWH system

The harvesting of rainwater simply involves the collection of water from surfaces on which rain falls, and subsequently storing this water for use. The rainwater collected can be stored for direct use or can be recharged into the underground aquifers. In scientific terms water harvesting (broadly) refers to collection and storage of rainwater from the rooftops. This also restricts evaporation and seepage into building foundations. *All buildings having a plot size of 100 sq.m. or more, while submitting the building plans for sanction, shall mandatorily include the complete proposal of rainwater harvesting.*

A rainwater harvesting system consists of:

- i. Roof catchment
- ii. Gutters
- iii. Down pipes
- iv. Rain water/ Storm water drains
- v. Filter Chamber
- vi. Storage Tanks/ Pits/ Sumps.
- vii. Ground Water recharge structures like pit, trench, tube well or combination of above structure.

Rainwater Harvesting is a way to capture the rain runoff, store that water above ground or charge the underground aquifers and use it later. This happens naturally in open rural areas. But in congested, over-paved metropolitan cities, there is a need to devise methods to capture the rain water. The rainwater that is incident on the surface/ roof top is guided to bore wells or pits or new/old/ abandoned wells through small diameter pipes to recharge the underground water which can be used later whenever required.

Rainwater can be harvested to the extent of 55,000 liters per 100sq. meters area per year from rooftops.

Rainwater harvesting techniques:

There are two main techniques of rain water harvestings.

- a. Storage of rainwater on surface for future use.
- b. Recharge to ground water.

Harvesting provisions in various Building categories:

All buildings in a city contribute to the rainwater runoff during the monsoon and hence such runoff can be harvested for water reuse/recharge.

The provisions of rainwater harvesting in various buildings types are:

Table 9.1 Provisions for Rainwater harvesting by building types

Category / Use	Area of Plot (sq.m.)	Provisions to be made	Other conditions
Residential Plotted Houses			
New Proposals	150 and above	Construction of Rain Water Harvesting Structure.	Shall have emphasis on both storage and reuse.
Group Housing			
New Proposals	All plot sizes	i. Construction of Rain Water Harvesting Structure. ii. Concrete paving to be avoided and permeable materials are to be used for all open parking spaces.	Should indicate the system of Storm Water Drainage, Rain Water Harvesting Structure and Recharging Well
Public and semi public buildings			
All Proposals	All plot sizes	i. Shall have Rain Water Harvesting Structure and storage ii. Shall have Recharge pits	Shall have emphasis on both storage and reuse.
Commercial / Mixed use			
All Proposals	All plot sizes	i. Construction of Rain Water Harvesting Structure. ii. Soft landscape provisions and open spaces with Percolation pits. iii. Common treatment plant to be made part of the integrated development, funded by sale of commercial space.	Should indicate the system of Storm Water Drainage, Rain Water Harvesting Structure and Recharging Well Shall have emphasis on both storage and reuse.
Industrial			
All proposals	All plot sizes	i. Construction of Rain Water Harvesting Structure. ii. Soft landscape provisions and open spaces with Percolation pits. iii. Use of abandoned bore wells for recharging of ground water. iv. Common treatment plant to be made part of the integrated development funded by sale of commercial space.	Should indicate the system of Storm Water Drainage, Rain Water Harvesting Structure and Recharging Well. Provision should be made not to inject contaminated water into recharge structures in industrial areas and care is to be taken to keep such structures away from sewer lines, septic tanks, soak pits, landfill and other sources of contamination.
Other proposals	All plot sizes	Similar as above	Similar as above

Note: The number of recharge bores to be provided in different plot sizes shall be accordance to SI No 2 of Table Nos. 14.1 - 14.3 of Chapter 14.

Enforcement and Monitoring

- a. The Board shall include inspection of Rainwater Harvesting Structures before issuing Completion Certificates or NOCs for service connections to the property.
- b. The Board shall also establish a mechanism to monitor 100% of RWH provisions in all the buildings above 500 sq.m. with annual physical verification, while buildings less than 500 sq.m. can be monitored on the basis of 10% random survey by competent authority.
- c. With regard to open public spaces viz., Parks, playgrounds etc. the implementation of provision rainwater harvesting may be done with the help of Residents Welfare Associations, Community Building Organization and Non-Governmental Organizations.
- d. The Authority shall ensure earmarking budgetary provision for the creation and maintenance of rainwater harvesting structures in public spaces owned and maintained by them, like parking spaces, parks, plazas etc.
- e. The practice of incentives and penalties to promote rain water harvesting shall be formulated by the Board based on best practices. Board shall design its own incentive and penalty systems, considering the water level and scarcity.

7. GREEN BUILDINGS AND SUSTAINABILITY PROVISIONS

Modern buildings consume about 25 to 30 % of total energy, and up to 30 % of fresh potable water, and generate approximately 40 % of total waste. Sustainable buildings have demonstrated reduction in energy and water consumption to less than half of the present consumption in conventional buildings, and complete elimination of the construction and operational waste through recycling.

Thus, 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.

Provisions and Applicability

The green building provisions on various plot sizes are indicated in the table below:

Table 10.1 Provisions and applicability for various plot sizes (Residential and Non-Residential)

Plot Category	Applicable plot area (sq.m)	Provisions for Residential	Provisions for Non- Residential
I	Up to 150	Nil	Nil
II	150 to 500	1(a), 2(a), 2(b), 4(a)	1(a), 2(b), 4(a)
	500 to 1,000	1(a), 1(c), 2(b), 3(c), 4(a)	1(a), 1(c), 2(a), 2(b), 3(c), 4(a)
	1,000 to 3,000	1(a), 1(c), 1(d), 2(a), 2(b), 3(b), 3(c), 4(a)	1(a), 1(c), 1(d), 2(a), 2(b), 3(b), 3(c), 4(a)
III	Above 3,000	1(a), 1(b), 1(c), 1(d), 2(a), 2(b), 3(a), 3(b), 3(c), 4(a), 4(b)	1(a), 1(b), 1(c), 1(d), 2(a), 2(b), 3(a), 3(b), 3(c), 4(a), 4(b)

***Note:** provisions marked 1(a), 2(b) etc are as per section 10.2.

The schemes/ projects formulated on the basis of provisions given in Master plan/ Zonal Development Plan will require approval as indicated:

EIA/ ECC (as per MoEF), NBC (latest), ECBC 2007 or latest, BEE Star rating/ LEED of IGBC/ GRIHA of TERI Certification}

EIA- Environmental Impact Assessment Study Report,

ECC- Environmental Clearance Certificate,

MoEF – Ministry of Environment and Forest,

NBC – National Building Code,

ECBC – Energy Conservation Building Code,

BEE – Bureau of Energy Efficiency,

LEED – Leadership in Energy and Environment Design,

IGBC – Indian Green Building Council,

GRIHA – Green Rating for Integrated Habitat Assessment,

TERI – The Energy and Resources Institute.

The prevailing provisions of the above shall be applicable. However if there are any modification in the same, the modified provisions shall become automatically applicable.

Provisions for Sanction

1. Water Conservation and Management
 - a) Rain Water Harvesting
 - b) Low Water Consumption Plumbing Fixtures
 - c) Waste Water Recycle and Reuse
 - d) Reduction of Hardscape
2. Solar Energy Utilization
 - a) Installation of Solar Photovoltaic Panels (detailed at section 10.2.3 below)
 - b) Installation of Solar Assisted Water Heating Systems
3. Energy Efficiency (Concept of *passive solar design of buildings*) (Ref. Table 14.1-3)
 - a) Low Energy Consumption Lighting Fixtures (Electrical Appliances – BEE Star and Energy Efficient Appliances)
 - b) Energy Efficiency in HVAC systems.
 - c) Lighting of Common areas by Solar energy/ LED devices.
4. Waste Management
 - a) Segregation of Waste
 - b) Organic Waste Management

In case owners of properties desire to procure green building ratings from one or more rating bodies, they may suitably incorporate any other provisions if required and additional incentive FAR as per decision of Board may be given.

Water Re-use and Recycling

All building having a minimum discharge of 10,000 l. and above per day shall incorporate waste water recycling system. The recycled water should be used for horticultural purposes.

Roof Top Solar Energy Installations

Rooftop photovoltaic power station, or rooftop PV system, is 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're clean, quiet, and visually unobtrusive. Table 10.2 below stipulates the Norms for Roof Top Solar PV Installation-

Table 10.2 Norms for Roof Top Solar PV Installation and generation

S.No.	Category of buildings/area	Area standards	Generation requirement *
Residential			
1	Plotted Housing	For HIG Plots and above	Minimum 5% of connected load or 20W/sqft for “available roof space”**, whichever is less.
2	Group Housing	All proposals, as per Group Housing Norms	Minimum 5% of connected load or 20W/sqft for “available roof space”, whichever is less.
All other buildings (Government or Private, defined as per clause 1.16 b to g) (mandatory for buildings having shadow free rooftop area > 50 sqmt)			
3 4 5 6 7 8	Educational Institutional Commercial Industrial Mercantile Recreational	Plot size of 500 sqmt and above	Minimum 5% of connected load or 20W/sqft for “available roof space”, whichever is less.

* Area provisions on roof top shall be @12 sqmt per 1KWp, as suggested by Ministry of New and Renewable Energy.

** “available rood area” = 70% of the total roof size, considering 30% area reserved for residents’ amenities.

Installation of Solar Assisted Water Heating System in Buildings

- I. 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 Home.
 - b) Hotels, Lodges, Guest Houses, Group Housing with a plot area of 4000 sq m.
 - 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 300 sq m. plinth area.
 - f) Functional Buildings of Railway Stations and Air Ports like waiting rooms, retiring rooms, rest rooms, inspection bungalows and catering units.
 - g) Community Centres, Banquet Halls, Barat Ghars, Mangal Karyalayas and buildings for similar use.

II. Definitions

i)	“Solar Assisted Water Heating System”	A device to heat water using solar energy as heat source.
ii)	“Auxiliary back-up”	Electricity 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.

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 3R rule of Reduce, Re-use and Re-cycle 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/ land-fill can be achieved by adopting systematic approach of segregation at source by planning, by collection facilitation and most importantly by creating public awareness.

The green waste can be converted into fuel cakes, kitchen waste into manure, construction & 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 land-fill is 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, ward or even lower levels.

8. FIRE PROTECTION AND FIRE SAFETY REQUIREMENTS

Scope

This part covers the requirements of the fire protection for the multi-storeyed buildings (high rise buildings) and the buildings, which are of 15 m. and above in height and low occupancies of categories such as Assembly, Institutional, Educational (more than two storeyed and built-up area exceeds 1000 sq m.), Business (where plot area exceeds 500 sq m.), Mercantile (where aggregate covered area exceeds 750 sq m.), Hotel, Hospital, Nursing Homes, Underground Complexes, Industrial Storage, Meeting/Banquet Halls, Hazardous Occupancies.

Procedure for clearance from fire service

The concerned Authority shall refer the building plans to the Chief Fire Officer for obtaining clearance in respect of building identified in clause 2.17.4 of these Bye-Laws.

The Authority shall furnish three sets of complete building plans along with prescribed fee to the Chief Fire Officer, after ensuring that the proposals are in line with Master Plan/Zonal Plan of the area.

The plans shall be clearly marked and indicate the complete fire protection arrangements and the means of access/escape for the proposed building with suitable legend along with standard signs and symbols on the drawings. The same shall be duly signed/certified by a licensed Fire Consultant/Architect.

The Chief Fire Officer shall examine these plans to ensure that they are in accordance with the provisions of fire safety and means of escape as per these bye-laws and shall forward two sets of plans duly signed for implementation to the building sanctioning Authority.

After completion of fire fighting installations as approved and duly tested and certified by the licensed Fire Consultant/Architect, the Owner/ Builder of the building shall approach the Chief Fire Officer through the concerned Authority for obtaining clearance from fire safety and means of escape point of view. The concerned Authority shall ensure that clearance from Chief Fire Officer has been obtained for the building identified in clause 11.1 before granting the completion certificate.

On receipt of the above request, the Chief Fire Officer shall issue the No Objection Certificate from fire safety and means of escape point of view after satisfying himself that the entire fire protection measures are implemented and functional as per approved plans.

Any deficiencies observed during the course of inspection shall be communicated to the Authority for rectification and a copy of the same shall be forwarded to the concerned building owner /builder.

11.3 Renewal of fire clearance

On the basis of undertaking given by the Fire Consultant / Architect, the Chief Fire Officer shall renew the fire clearance in respect of the following buildings on annual basis:-

- 1) Public entertainment and assembly
- 2) Hospitals
- 3) Hotels
- 4) Underground shopping complex

11.4 Fee

For augmentation of fire service facilities for effecting rescue/fire fighting operation in high rise building, fee payable to Chief Fire Officer by the applicant(s) along with sets of plans for obtaining the No Objection Certificate shall be as prescribed by the Authority.

Fire Consultant

The engaged Competent Professional for building plan design of the project shall be responsible for making provisions for fire protection and fire fighting measure as provided in this Chapter and for that she / he may consult an expert in this field, as in case of other professionals for structural, sanitary and others.

Terminology

For the purpose of this Chapter all the technical terms shall have the meaning as defined in National Building Code of India, Part-IV, Fire Protection as amended from time to time but for the terms which are defined otherwise in these bye-Laws.

General

The Chief Fire Officer may insist on suitable provisions in the building from fire safety and means of escape point of view depending on the occupancy, height or on account of new developments creating special fire hazard, in addition to the provision of these building bye laws and part IV (Fire Protection) of National Building Code of India

Fire Resistance of Types of Constructions / Building Components

Building elements/components such as walls, columns, beams and floors shall have the requisite fire resistance rating in accordance with the accepted standards.

The following Sections MEANS OF ACCESS

As provided in Building Bye-Laws,

Provisions of Exterior Open Spaces around the Building:

As provided in building bye laws

Fire Escapes or External Stairs:

- a) Fire escape shall not be taken into account while calculating the number of staircases for a building.
- b) All fire escapes shall be directly connected to the ground.
- c) Entrance to the fire escape shall be separate and remote from internal staircase.
- d) The route to fire escape shall be free of obstructions at all times except the doorway leading to the fire escape which shall have the required fire resistance.
- e) Fire escape shall be constructed of non-combustible materials.
- f) Fire escape stairs shall have straight flight not less than 125 cm wide with 25 cm treads and risers not more than 19 cm.
- g) Handrails shall be at a height not less than 100 cm.
- h) Fire escape staircase in the mercantile, business, assembly, hotel buildings above 24 m. height shall be a fire tower and in such a case width of the same shall not be less than the width of the main staircase. No combustible material shall be allowed in the fire tower.

Spiral Stairs

- a) The use of spiral staircase shall be limited to low occupant load and to a building height 9 m.
- b) A spiral stair shall not be less than 150 cm in diameter and shall be designed to give the adequate headroom.

Staircase Enclosures

- a) The external enclosing walls of the staircase shall be of the brick or the R.C.C. construction having fire resistance of not less than two hours. All enclosed staircases shall have access through self-closing door of one-hour fire resistance. These shall be single swing doors opening in the direction of the escape. The door shall be fitted with the check action door closers.

- b) The staircase enclosures on the external wall of the building shall be ventilated to the atmosphere at each landing.
- c) Permanent vent at the top equal to the 5% of the cross sectional area of the enclosure and openable sashes at each floor level with area equal to 1 to 15% of the cross sectional area of the enclosure on external shall be provided. The roof of the shaft shall be at least 1 m. above the surrounding roof. There shall be no glazing or the glass bricks in any internal closing wall of staircase. If the staircase is in the core of the building and cannot be ventilated at each landing, a positive of 5-mm. e.g. by electrically operated blower/blowers shall be maintained.
- d) The mechanism for pressurizing the staircase shaft shall be so installed that the same shall operate automatically on fire alarm system/sprinkler system and be provided with manual operation facilities.

Ramps

- a) Ramps of slope of not more than 1 in 10 may be substituted for and shall comply with all the applicable requirements of all required stairways as to enclosure capacity and limiting dimensions. Larger slopes shall be provided for special uses but in no case greater than 1 in 8. For all slopes exceeding 1 in 10 and where the use is such as to involve danger of slipping, the ramp shall be surfaced with approved non-slipping material.
- b) The minimum width of the ramps in the Hospitals shall be 2.4 m. and in the basement using car parking shall be 6.0 m.
- c) Handrails shall be provided on both sides of the ramp.
- d) Ramp shall lead directly to outside open space at ground level or courtyards of safe place.
- e) For building above 24.0 m. in height, access to ramps from any floor of the building shall be through smoke fire check door.
- f) In case of nursing homes, hospitals etc. area exceeding 300 sq m. at each floor one of the exit facility shall be a ramp of not less than 2.4 m. in width.

Provision of lifts

- a) Provision of the lifts shall be made for all multi-storeyed building having a height of 15.0 m. and above.
- b) All the floors shall be accessible for 24 hrs. by the lift. The lift provided in the buildings shall not be considered as a means of escape in case of emergency.
- c) Grounding switch at ground floor level to enable the fire service to ground the lift car in case of emergency shall also be provided.
- d) The lift machine room shall be separate and no other machinery be installed in it.

Lift Enclosure/lift

General requirements shall be as follows

- a) Walls of lift enclosures shall have a fire rating of two hours. Lift shafts shall have a vent at the top of area not less than 0.2 sq m.
- b) Lift motor room shall be located preferably on top of the shaft and separated from the shaft by the floor of the room.
- c) Landing door in lift enclosures shall have a fire resistance of not less than one hour.
- d) The number of lifts in one lift bank shall not exceed four. A wall of two hours fire rating shall separate individual shafts in a bank.
- e) Lift car door shall have a fire resistance rating of 1 hour.
- f) For buildings 15.0 m. and above in height, collapsible gates shall not be permitted for lifts and solid doors with fire resistance of at least one hour shall be provided.
- g) If the lift shaft and lobby is in the core of the building a positive pressure between 25 and 30 pa shall be maintained in the lobby and a possible pressure of 50 pa shall be maintained in the lift shaft. The mechanism for the pressurization shall act automatically with the fire alarm/sprinkler system and it shall be possible to operate this mechanically also.
- h) Exit from the lift lobby, if located in the core of the building, shall be through a self-closing fire smoke check door of one-hour fire resistance.
- i) Lift shall not normally communicate with the basement. If however, lifts are in communication, the lift lobby of the basement shall be pressurized as in (g) with self closing door as in (h).
- j) Grounding switch(es), at ground floor level shall be provided to enable the fire service to ground the lifts.
- k) Telephone/talk back communication facilities may be provided in lift cars for communication system and lifts shall be connected to the fire control room of the building.
- l) Suitable arrangements such as providing slope in the floor of the lift lobby shall be made to prevent water used during fire fighting, etc at any landing from entering the lift shafts.
- m) 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 the stairways. Floor marking shall be done at each floor on the wall in front of the lift-landing door.
- n) Alternate power supply shall be provided in all the lifts.

Fire Lift

Following details shall apply for a fire lift in addition to above requirements:

- a) To enable fire service personnel to reach the upper floors with the minimum delay, one or more of the lifts shall be so designed so as to be available for the exclusive use of the fireman in an emergency and be directly accessible to every dwelling/lettable floor space on each floor.
- b) The lift shall have a floor area of not less than 1.4 sq.mt. It shall have a loading capacity of not less than 545 kg. (8 persons lift) with automatic closing doors.
- c) The electric supply shall be on a separate service from electric supply mains in a building and the cables run in a route safe from fire, that is within a lift shaft. Lights and fans in the elevator having wooden paneling or sheet steel construction shall be operated on 24-volt supply.
- d) In case of failure of normal electric supply, it shall automatically switch over to the alternate supply. For apartment houses, this changeover of supply could be done through manually operated changeover switch. Alternatively, the lift should be so wired that in case of power failure, it comes down at the ground level and comes to stand still with door open.
- e) The operation of a fire lift shall be by a single toggle of two-button switch situated in a glass-fronted box adjacent to the lift at the entrance level. When the switch is on landing; call points will become inoperative and the lift will be on car control only or on a priority control device. When the switch is off, the lift will return to normal working. This lift can be used by the occupants in normal times.
- f) The words '*FIRE LIFT*' shall be conspicuously displayed in fluorescent paint on the lift landing doors at each floor level.
- g) The speed of the fire lift shall be such that it can reach to the top floor from ground level within one minute.

Basement

As provided in *Chapter- 4* and Building Bye-Laws.

11.10.1 Requirements

- i) The access to the basement shall be either from the main or alternate staircase providing access and exit from higher floors. Where the staircase is continue the same shall be enclosed type serving as a fire separation from the basement floor and higher floors. Open ramps shall be permitted if they are constructed within the building line subject to the provision of the (iv).
- ii) In case of basement for office, sufficient number of exit ways and access ways shall be provided with a travel distance not more than 15.0 m. The travel distance in case of dead-end shall be 7.5 m.
- iii) The basement shall be partitioned and in no case compartment shall be more than 500 sq m. and less than 50 sq m. area except parking. Each compartment shall have ventilation standards as laid down in Bye-Laws separately and

independently. The partition shall be made in consultation with Chief Fire Officer.

- iv) The first basement (immediately below ground level) can be used for services/parking/other permissible services. Lower basement, if provided, shall exclusively be used for car parking only.
- v) Each basement shall be separately ventilated. Vents with cross-sectional area (aggregate) not less than 2.5 percent of the floor area spread evenly round the perimeter of the basement shall be provided in the form of grills or breakable starboard 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 starboard or pavement lights as before. But ducts to convey fresh air to the basement floor level have to be laid. Starboard and pavement lights should be in positions easily accessible to the firemen and clearly marked "SMOKE OUTLET" or "AIR INLET" with an indication of area served at or near the opening.
- vi) The staircase of basement shall be of enclosed type having fire resistance of not less than two hours and shall be situated at the periphery of the basement to be entered at ground level only from the open air and in such positions that smoke from any fire in the basement shall not obstruct any exit serving the ground and upper stories of the building and shall communicate with basement through a lobby provided with fire resisting self closing door of one hour rating. In case of basement being used as car parking only, the travel distance shall be 45 m.
- vii) In multi-storeyed basements, intake duct may serve all basements levels, but each basement and basement compartment shall have separate smoke outlet duct or ducts. 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 smoke, heat sensitive detectors/sprinklers, if installed, and shall have a considerably superior performance compared to the standard units. It shall also have an arrangement to start it manually.
- viii) Mechanical extractors shall have an internal locking arrangement so that extractors shall continue to operate and supply fans shall stop automatically with the actuation of fire detectors. Mechanical extractors shall be designed to permit 30 air changes per hour in case of fire or distress call. However, for normal operation, only 30 air changes or any other convenient factor can be maintained.
- ix) Mechanical extractors shall have an alternate source of power supply.
- x) Ventilating ducts shall be integrated with the structure and made out of brick masonry or RCC as far as possible and when this duct crosses the transformer area of electrical switchboard, fire dampers shall be provided.
- xi) Kitchens working on gas fuel shall not be permitted in basement/sub-basement.
- xii) If cutouts are provided from basement to the upper floors or to the atmosphere, all side cutout openings in the basements shall be protected by sprinkler heads at closed spacing so as to form a water curtain in the event of a fire.
- xiii) Dewatering pump shall be provided in all basements.

Air-conditioning

- a) Air- conditioning system should be installed and maintained so as to minimize the danger of spread of fire, smoke or fumes thereby from one floor of fire area to another or from outside into any occupied building or structure.–
- b) Air -Conditioning systems circulating air to more than one floor area should be provided with dampers designed to close automatically in case of fire and thereby prevent spread of fire or smoke. Such a system should also be provided with automatic controls to stop fans in case of fire, unless arranged to remove smoke from a fire, in which case these should be designed to remain in operation.
- c) Air- conditioning system serving large places of assembly (over one thousand persons), large departmental stores, or hostels with over 100 rooms in a single block should be provided with effective means for preventing circulation of smoke through the system in the case of fire in air filters or from other sources drawn into the system even though there is insufficient heat to actuate heat smoke sensitive devices controlling fans or dampers. Such means shall consist of approved effective smoke sensitive controls.

FORM – 'A'

NOTICE TO ERECT / RE-ERECT BUILDING UNDER SECTION 235

OF THE CANTONMENT ACT, 2006

From,

.....
.....
.....

To,

The Chief Executive Officer,
Mathura Cantt.

SUBJECT :- BUILDING PLAN

I hereby given notice under Section 235 of the Cantonment Act, 2006 that I intend to erect / re-erect a building as specified in form 'B' attached on the site situation in

The request plan / specification in triplicate / quadruplicate are attached herewith. I also agree that I will not claim any civil amenities from the Cantt. Board and pay all the Cantt. Taxes.

Encls :

Signature :

Date :

FORM-'B'

Specifications of the proposed building :-

1. In case of erection/ re-erection of an entries building for a considerable portion thereof :-
 - a) Number of thehouse or Site, if any
 - b) Name of street, bazaar or locality
 - c) The purpose for which the building is intended to be used.
 - d) The number of storey of which the building will consist.
 - e) The material to be used in construction of the roofs, wall etc.
 - f) The position and dimensions of all doors, windows and ventilation/ openings.
 - g) The approximate number of inhabitants proposed to be accommodated.
 - h) Number of latrines to be provided
2. In case of minor alterations and additions :-
 - a) Number of house if any.
 - b) Name of street, bazaar or locality.
 - c) A brief description of the alterations / additions.
 - d) The materials to be used for said alterations / additions.

Signature :

Dated.:

INDEMNITY BOND FOR BASEMENT

This Indemnity Bond is executed by Shri/Smt..... S/o,
D/O, W/O Shri/Smt.....
R/O.....in favour of Cantonment Board, Mathura.

Whereas the executant has submitted to the Cantonment Board, Mathura the plans for, sanction of basement over Plot No....._under the provisions of the Act and lie bye-laws made there under:-

And whereas the Cantonment Board, Mathura has agreed to sanction the aforesaid construction subject to the conditions that the owner shall indemnify the Board in the event of any loss or damage being cause to the adjoining building on account of the construction of the said basement either at the time of digging of its foundations or in the course of its construction or even thereafter and also against any claim of any concern thereto.

And whereas the executant has agreed to execute an indemnity bond to the above affect and also to abide by the terms imposed by the concerned Authority to the grant of sanction for construction of the basement.

Now this deed witnesses:

1. That in consideration of the sanction of the plans by..... for construction of the basement the executant undertakes that he/she shall at all times keep.....harmless and free from any liability, loss or damages/ flowing from any injury or damage caused to the adjoining built-up properties or to any person as a consequence of the construction of at the time of digging of its foundations or during the course of its construction or at any time thereafter.
2. The owner agreed and undertakes that in the event of any claim being made by any person or persons against the Board either in respect of the sanction granted by the Board to the owner for the construction of basement or in respect of the construction or manner of construction of the basement by the owner or the consequences flowing from the said sanction the executant shall be responsible and liable and not the Board.
3. The executant agrees and undertake to indemnify the Board fully in respect of any amount which the Board may be required to pay to any person either by way of compensation or damages or on any other account as a result of any claim or suit or any other proceedings concerning the sanctioningof the construction of the basement of the making thereof and also in respect of the costs and expenses which the Board may incur on defending any action.

- 4 Without prejudice to the above undertaking the executant hereby binds itself to pay to the Board to the full extent any amount which the Board may be required to pay to any person in connection with, relating to or concerning the sanctioning of the basement or the making thereof.
- 5 The owner further agrees and undertakes that this bond shall remain in full force and effect till the executant faithfully observes/performs the undertaking herein before contained.

In witness whereof the executant above named has signed this bond on this
 day ofat.....

Indemnifier

Witness:

(Signatures).....

1. Name.....

Full Address.....

(Signatures).....

2. Name.....

Full Address.....