

## CANTONMENT BOARD AMRITSAR BUILDING BYE LAWS- 2017

# Draft AMRITSAR CANTONMENT BOARD

## **BUILDING BYELAWS**

2017



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**PRELUDE** 

Building Bye-Laws are legal tools used to regulate coverage, height, building bulk, and

architectural design and construction aspects of buildings so as to achieve orderly

development of an area. They are mandatory in nature and serve to protect buildings

against fire, earthquake, noise, structural failures and other hazards.

Each cantonment Board is under a legal obligation to frame Building Bye Laws under the

provisions of Section 62 (xviii) and (xxi) read with Section 251 of the Cantonments Act,

2006. Existing building bye laws and building regulations of Cantonment Board Amritsar

have become very old and have not kept pace with requirements of urban planning and

Cantonment Administration.

The Ministry of Urban Development and Planning also circulated Model Building Bye

Laws which should be scrupulously followed while making the Building Bye laws by

every local body.

Thus, keeping in mind the these Model Building Bye Laws, provisions of the Cantonment

Act 2006 and to upgrade the Building Bye Laws to keep in pace with the present day

requirements, draft Building Bye Laws 2017 have been prepared for the Cantonment

Board, Amritsar. These Building Bye Laws aim to make Amritsar Cantonment as Smart

Cantonment with provisions specially included for Solar Energy, rainwater Harvesting,

Provisions for disabled persons. They also aim to bring modern Municipal requirements

to the Cantonment.

Dhiraj Sonaje, IDES Chief Executive Officer Amritsar Cantt **FOREWARD** 

I, being the President, Cantonment Board, Amritsar feel proud to bring out new draft

building bye laws which aim at meeting the requirements of urban planning and present

day aspirations and needs of residents of Cantonment. The new Building Bye laws try to

introduce Modern Municipal Management procedures/techniques in such areas by

having provisions such as FAR, structural safety, ground coverage, setbacks, parking

space etc.

With inclusion of provisions for Rainwater Harvesting, disabled people and Solar energy

etc, they try to make turn Cantonment into Smart Cantonment. They try to take care of

social and environmental needs of the residents of Cantonment area.

However, as Cantonment also houses troops, due care has been taken to control

commercialization, overcrowding and discouraging migration of new population into

Cantonment. Provisions are based on security considerations and restrictions imposed

under Aircraft Act.

I am sure that this will be a milestone in the ushering the development of Cantonment.

**Brig Sushil Sharma** 

President

**Cantonment Board** 

**Amritsar** 

## BUILDING BYE LAWS AMRITSAR CANTONMENT BOARD 2017

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#### CHAPTER -I

#### **ADMINISTRATION**

#### 1. SHORT TITLE AND COMMENCEMENT:

- 1.1 These byelaws shall be called the AMRITSAR CANTONMENT BUILDING BYELAWS, 2017.
- 1.2 The Building Byelaws shall apply to the building activity in Amritsar Cantonment.
- 1.3 These Byelaws shall supercede the existing Building Bye-laws Gazetted vide Notification No. 18567 dated 30.05.1922.
- 1.4 These Byelaws shall come into force on the date of their final publication in the official Gazette.

#### 2. DEFINITION:

#### 2.0 **GENERAL**

- 2.0.1 In these Byelaws unless the context otherwise requires the definitions given under Bye-laws 2.1 to 3.6 shall have the same meaning indicated against each of them for the purposes of these Bye-laws.
- 2.0.2 Words and expressions not defined in these Byelaws shall have the same meaning or sense as in the
  - i. The Cantonments Act, 2006, as amended from time to time.
  - ii. The National Building Code of India, 2005, as amended from time to time.
- 2.1 "Act" means the Cantonments Act, 2006 (41 of 2006), as amended from time to time.
- 2.2 "Accessory Building" means a building separated from the main building on a plot and containing one or more accessory uses.
- 2.3 "Accessory Use" means any use of the premises subordinate to the principal use and customarily incidental to the principal use.
- 2.4 "Addition to a building" means addition to the cubic contents or to the floor area of a building.

- 2.5 "Advertising Sign" means any surface of structures with characters, letters or illustrations applied thereto and displayed in any manner whatsoever out of doors for purposes of advertising or to give information regarding or to attract the public to any place, person, public performance, article or merchandise whatsoever, 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 any pole, screen, fence or is fixed to a tree or to the ground or any pole, screen, fence or hoarding or displayed in space.
- 2.6 "Air Conditioning" means the process of treating air as to control and regulate the temperature and humidity in a building to meet the requirement of conditioned space.
- 2.7 "Alteration" means substantial change in character, form and structure of building such as an addition to the area or height, or the removal of part of building or any other change to the structure such as construction of cutting into or construction of any wall, partition, columns, beams joints, floor or other support or a change to or closing of any required means of ingress or egress or change to the fixtures or equipments, all or anyone of which has the effect of affecting the security of the old building.
- 2.8 "Applicant" means in relation to these Bye-laws a person(s) being owner / HOR / Lessee or anyone duly authorized to do so, who has submitted an application notice for undertaking erection / re-erection of a building / house and /or activities connected thereto.
- 2.9 "Automatic Sprinkler System" means an arrangement of piping and sprinklers, designed to operate automatically by the heat of fire and to discharge water upon that fire and which may also simultatneously give automatic audible alarm.
- 2.10 "Area in relation to the building" means the superfaces of a horizontal section thereof made at the plinth level inclusive of the external walls and of such portion of the part walls as belongs to the building;
- 2.11 "Balcony" means a horizontal projection including a Hand rail, balustrade or a parapet to serve as a passage or sitting out place, if roofed becomes balcony verandah.
- 2.12 "Barsati" means a shed or covered space, which is not enclosed on all sides, used for shelter on the roof or a building.
- 2.13 "Basement storey" or "Cellar" means any storey of a building which is under the first storey and any portion of which is below the level of the adjoining pavement of the surrounding ground;

- 2.14 "Bazar" or "Market" shall be deemed to be synonymous with the expression "Market" and is a place or area reserved or licensed for the erection of group of shops or stalls;
- 2.15 "Bazar Area" means any area declared by the Central Government in the official Gazette under Rule 2(b) of the Cantonment Land Administration Rules, 1937.
- 2.16 "Board" means the Cantonment Board, constituted under the Act.
- 2.17 **"Building"** means 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".
  - "Building Commercial" means a building, the whole or a substantial part, not less than two thirds or whose entire floor area, is used or intended to be used, for business purposes;
- 2.18 "Building height" means the vertical distance measured, in the case of flat roofs from the average level of the centre line of the adjoining street to the highest points of the building adjacent to the street wall, and in the case of pitched roofs upto the point where the external surface of the outer wall intersects the finished surface of the sloping roof and in the case of gable facing the road, the mid- point between the eaves level and the ridge, architectural features serving no other function except that of decoration shall be excluded for the purpose of taking heights, and if the building does not abut on a street, the height shall be measured above the average level of the ground around and contiguous to the building;
- 2.19 "Building industrial" means a building wholly or principally used as a factory, warehouse, laundry, brewery, distillery, iron foundry or for any similar purpose;
- 2.20 "Building line" means the line upto which the plinth of a building adjoining on a street or on an extension of a street or on a future street may lawfully extend and includes the line prescribed, if any, in any scheme;

- 2.21 "Building public" means a building used or intended to be used either ordinarily or occasionally as a church, chapel, temple, mosque or any other place of public worship, dharmashala, college, school, hostel, theatre, cinema, public concert room, lecture room, library, orphanage or rescue home or any other place of public assembly;
- 2.22 "Building residential" means a building used or constructed or adapted to be used wholly or principally for human habitation, and includes garages, stables and out-houses appurtenant thereto;
- 2.23 "Built-up area" means an area covered by all the floors immediately above the plinth level of the building except space used for parking which is open from sides.
- 2.24 "Canopy" means a cantilever projection from the face of a 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.
- 2.25 **"Cantilever"** means a projection from the face of all wall over an entry to the building at slab level provided that
  - i. It shall not project beyond the prescribed side margins.
  - ii. It shall not be lower than 3.0 mtrs. or 10' when measured from the around.
  - iii. There shall be no structure on it and the top shall remain open to sky.
- 2.26 "Carpet Area" means the net floor area within the building excluding the area of walls, common passages, stair case, toilet and balcony.
- 2.27 "Ceiling height" means vertical distance between the floor and the ceiling.
- 2.28 **"Chajja"** or **Sunshade** means a sloping or horizontal structural over hang usually provided over opening on external walls to provide protection containing and encasing one or more flues;
- 2.29 "Chimney" means an upright shaft containing and encasing one or more flues provided for the conveyance to the outer air of any product of combustion resulting from the operation of heat producing appliance or equipment employing solid, liquid or gaseous fuel.
- 2.30 "Civil Area" means an area declared to be a Civil Area by the Central Government under Sub Section (1) of Section 46 of the Act.

- 2.31 "Combustible material" means any material if it burns or adds heat to a fire when tested for combustibility in accordance with I.S.3808-1966 method of test for combustibility of building materials;
- 2.32 "Court-yard" means a space open to the sky, enclosed or partially enclosed, by building boundary walls or by railing and shall be at ground floor level.
- 2.33 "Court yard or Chowk" means a space permanently open to the sky, enclosed fully or partially by a building and may be at ground level or any other level within or adjacent to a building.

Chowk Inner- A chowk enclosed on all sides.

Chowk outer – A chowk where one of the sides is not enclosed.

- 2.34 **"Covered area"** means ground area covered by the building immediately above plinth level, but does not include the space covered by:
  - a. Garden, rockery, well and well structure, plant nursery, water pool, swimming pool (if uncovered), platform round a tree, tank, fountain, bench, chabutra with open top and unenclosed sides by walls and the like:
  - b. Drainage, culvert, conduit, catch pit, gully pit, chamber, gutter and the like and
  - c. Compound wall, gate, unstoreyed porch and portion slide, swing, uncovered staircase, areas covered by chajja and the like,
- 2.35 **"Damp Proof Course"** means a course consisting of some appropriate water proofing material provided to prevent penetration of dampness or moisture.
- 2.36 "**Detached building**" means a building whose walls and roof are independent of any other building;
- 2.37 **"Drainage"** means act, process, method or means of drainage, made of discharge of water; the system of drains;
- 2.38 "**Dwelling Unit**" means a building or a portion thereof which is designed or used wholly or principally for residential purpose for one family;
- 2.39 **"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.
- 2.40 **"Enclosed Staircase"** means a staircase separated by fire resistant walls and door(s) from the rest of the building.

- 2.41 **"Existing building or use"** means a building, structure or its use existing authorized before the commencement of these Rules.
- 2.42 "External wall" means 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;
- 2.43 "Fire Resistance" means the time during which a fire resistant material i.e. material having a certain degree of fire resistance, fulfills its function of contributing to the fire safety of a building when subjected to prescribed conditions of heat and load or restraint. The fire resistance test of structures shall be done in accordance with IS 3809-1979, Fire Resistance Test of Structure.
- 2.44 **"Floor"** means 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.
- 2.45 "Floor Area Ratio (FAR)" means 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.: -

Floor Area Ratio(F.A.R.) =  $\frac{\text{Total covered area of all floors x 100}}{\text{Plot area}}$ 

- 2.46 **"Flue"** means a confined space provided for the conveyance to the outer air of any product of combustion resulting from the operation of any heat producing appliance or equipment employing solid, liquid or gaseous fuel;
- 2.47 "**Footing**" means offset portions of a foundation to provide a greater bearing area;
- 2.48 **"Foundation"** means that part of the structure which is below the lower most floor and which provides support for the superstructure and which transmits loads of the superstructure to the bearing materials
- 2.49 **"Frontage"** means the measurement of the side of any site abutting the road.
- 2.50 "Gallery" means raised portion of a room which remains open to the room and the floor of the gallery may be either level or stepped;

- 2.51 "Garage private" means a building or outhouse designed or used for the storage of private owned motor driven or other vehicle;
- 2.52 "Garage public" means a building or portion thereof designed other than a private garage, operated for gain, designed or used for repairing, servicing, hiring, selling, or storing motor driven or other vehicles.
- 2.53 **"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.
- 2.54 "Habitable room" means 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 bathroom, water closet compartments, laundries serving and storage pantries, corridors, cellar attics and spaces that are not used frequently or during extended period.
- 2.55 "Holder of Occupancy Rights" (HOR) means the person(s) who is not the owner of land or site but holds the right of occupancy of a site on defence land as in the case of OLD Grant sites and leases in the Cantonments.
- 2.56 "Horizontal Exit" means a Horizontal exit is a protective opening through or around afire wall or a bridge connecting two buildings.
- 2.57 "Hotel" means a building used as place for abode and for providing means and accommodation on payment for more than 15 persons with or without meals.
- 2.58 "Ledge" means a shelf- like projection supported in any manner whatever except by means of vertical supports within a room itself but not having projection wider than 0-9 metres and at a height of not less than 2.40 metres from the floor
- 2.59 "Lessee" means a person who holds the site on lease on defence land in the Cantonment
- 2.60 "Licensed Architect/ Engineer/ Structural Engineer" means a qualified architect, engineer, structural engineer, who has been licensed by the authority or who is entitled to practice as an Architect under the Architect Registration Act, 1972.
- 2.61 "Lift" means an appliance designed to transport persons or materials between two or more levels on a vertical or substantially vertical directions by means of a guided car platform. The word elevator is also synonymously used for lift.

- 2.62 "**Loft**" means an intermediate floor in between two main floors but not more than 1.5 metres in height which may be adopted or constructed for storage purposes.
- 2.63 "Masonary" means the form of construction composed of brick, stone, structural clay tile, concrete blocks, gypsm or other similar building units or materials or combination of these materials laid up unit by unit bonded together and set in mortar.
- 2.64 "Means of Escape" means an escape route provided in a building for safe evacuation of occupants.
- 2.65 "Mezzanine Floor" means an intermediate floor, between two floor levels above ground level and shall not be more than 33 1/3% of that floor area.
- 2.66 "**Mixed Use**" means and includes use of any building / house for more than one purpose as given at 2.68.
- 2.67 "Non- combustible" means such material which neither burns nor gives off inflammable vapours in sufficient quantity to ignite at a pilot flame.
- 2.68 "Occupancy or Use Group" means the principal occupancy for which a building or a part of a building is used or intended to be used; for the purposes of classification of a building according to the occupancy. An occupancy shall be deemed to include subsidiary occupancies which are contingent upon it. Buildings with mixed occupancies are those building in which more than one occupancy is present in different portions of the buildings.

The occupancy classifications shall have the following meaning unless otherwise specified and spelt out:-

- a. Residential Buildings These shall include any building in which sleeping accommodation is provided for normal residential purposes with or without cooking or dining or both facilities. It includes one or more multi-family dwellings, lodging or rooming houses, hostels, dormitories, apartment houses and flats, residential hotels and private garages.
- b. **Educational Buildings** These shall include any building used for school, college or day-care purposes for more than 8 hours per week involving assembly for instruction, education or recreation incidental to education.
- c. Institutional Buildings- These shall include any building or part thereof which is used for purposes such as medical or other treatment or care of persons infirmity, care of infants, convalescents or aged persons and for penal or correctional detention in which the liberty of the inmates is restricted.

Institutional buildings ordinarily provide sleeping accommodation for the occupants. They include hospitals, sanatoria, custodial institutions and panel institutions like jails, prisons, mental hospitals, reformatories etc.

- d. Assembly Building These shall include any building or part of a building where groups of people congregate or gather for amusement, recreation, social, patriotic, civil, travel and similar purposes; for example theatres, motion picture houses, drive-intheatres, assembly halls, city halls, town halls, auditoria, exhibition halls, museums, mangal karyalaya, skating rinks, gymnasiums, restaurants, eating houses, boarding houses, dance halls, club rooms, gymkhana, passenger stations and terminals of air, surface and other public transportation services, recreation piers and stadia etc.
- e. **Business buildings** These shall include any building or part of a building, which is used for transaction of business for the keeping of accounts and records for similar purposes; offices, banks, professional establishments, court houses, records and references libraries shall be classified in this group is so far as principal function of these is transaction of public business and the keeping of books and records.
- f. Office buildings (Premises)- The premises whose sole or principal use is to be used as an office or for office purpose; "office purpose" includes the purpose administration, clerical work, handling money, telephone and telegraph operating and operating computers and "clerical work" includes writing, book-keeping, sorting papers, typing, filing, duplicating, punching cards or tapes, machine calculating drawing of matter for publication and the editorial preparation of matter for publication.
- g. **Mercantile Buildings** These shall include any building or part of a building, which is used as shops, stores, market for display and sale of merchandise either wholesale or retail. Office, storage and service facilities incidental to the sale of merchandise and located in the same building shall be included under this group.
- h. Wholesale Establishments These shall include establishments wholly or partly engaged in wholesale trade, manufacture's wholesale outlets including related storage facilities, warehouses and establishments engaged in trunk transport including trunk transport booking agencies.
- i. **Industrial building -** These shall include any building or part of a building or structure in which products or materials of all kinds and properties are fabricated, assembled or processed like assembly plants, laboratories, power plants, smoke houses, refineries, gas plants, mills, dairies, factories etc.
- j. **Storage Buildings -** These shall include any building or part of a building used primarily for the storage or sheltering of goods, wares

- or merchandise, like ware houses, cold storages, freight depots, transit sheds, store houses, public garages, hangers, truck terminals, grain elevators, barns and stables.
- k. Hazardous Buildings These shall include any building or part of a building which is used for the storage, handling, manufacture or processing of highly combustible or explosive materials or products which may produce poisonous fumes or explosions during storages, handling, manufacturing or processing which involve highly corrosive, toxic or noxious alkalies, acids or other liquids or chemicals producing flame, fumes and explosion, mixtures of dust or which result in the division of matter into fine particles subject to spontaneous ignition.
- I. Public Building-Except where otherwise defined means a building owned and used by Government or Semi-Government Authority, Public Registered Trust or such other public agency, for public purposes such as public workshop, education, health and public offices of Government or Semi-Government Authorities. Such a building shall be made accessible to and barrier free for the persons with disabilities.
- m. **Religious Building-**These shall include any building or a part of a building, which is primarily used for a place of worship / congregation / sermons / prayers.

Provided further that the buildings listed as above except at a, b, c, & m shall be treated as Commercial Buildings.

- 2.69 "Parapet" means a low wall built along the edge of a roof or a floor not more than 1.20 metres height.
- 2.70 "Parking space" means an area enclosed or unenclosed sufficient in size to park vehicles together with a drive-way connecting the parking space with a street or alley and permitting ingress and egress of the vehicles;
- 2.71 "Partition" means a wall, which supports no load other than its own weight.
- 2.72 "Party wall" means and includes,
  - a. A wall forming part of a building and being used or constructed to be used in any part of the height or length of such wall for separation of adjoining buildings belonging to different owners or occupied or constructed or adopted to be occupied by different persons or
  - b. 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 on grounds of different owners.

- 2.73 **"Permission or Permit"** means a valid permission or authorization in writing by the Competent Authority to carryout development or work regulated by these Byelaws.
- 2.74 "Pillar" means a wood stone, brick, RCC or a metal pillar and includes all columns or stanchions and an assemblage of columns or stanchions properly riveted or welded or bolted together.
- 2.75 "Plinth" means the portion of a structure between the surface of the surrounding ground and surface of the floor, first above the ground, and 'plinth level' means the level of the ground floor of the building above the surrounding ground.
- 2.76 "**Plinth Area**" means the maximum built up covered area measured externally at the floor, first above the ground or the basement.
- 2.77 "Plot" means a parcel or a land occupied or intended for occupancy by one main building, together with the accessory buildings and used customarily and incidental to it, including the open spaces required by these byelaws and having frontage upon a street or upon a private way that has been approved by the authority having jurisdiction.
- 2.78 "**Plot corner**" means a plot at the junction of and fronting on two or more intersecting streets.
- 2.79 "Plot double frontage" means a plot having frontage on two streets other than a corner plot.
- 2.80 **"Porch"** means covered surface supported on pillars or otherwise for the purpose of pedestrian or vehicular approach to a building.
- 2.81 "Repairs /Maintenance" means and include:
  - a. Plastering and patch repairs
  - b. Flooring and re-flooring
  - c. Opening, ventilators and doors, but not opening towards the other property and without door leaves opening on public land on the ground floor.
  - d. Replacing fallen bricks, doors, windows stones, pillars, beams, walls etc in a building / house without changing the cubical capacity of the existing rooms/ structure, but not by way of pulling down / demolishing the entire structure.
  - e. Construction or reconstruction of sunshades not more than 0.75 metres in width within one's own land and not over-hanging on public street.

- f. Construction or reconstruction of a parapet wall not exceeding 1.20 metres in height and purdah walls upto a maximum height of 1.60 metres.
- g. Reconstruction of a loft in shops in built-up commercial area upto ten percent provided its height from floor level is not less than 2.10 metres and height between the ceiling and the lofts is not more than 1.5 metres and that the loft is used for storage purpose only.
- h. Construction and reconstruction of sign board in a front of shop provided it does not project beyond the boundary line of the plot on which the shop stands.
- i. Restoring portion of a building damaged by storm, rains, fire, earthquake or any natural calamity to the extent of authorized built up space but not by way of pulling down / demolishing the entire building.
- j. Reconstruction of staircase of the same size and in the same position as previously and
- k. Construction of uncovered staircase (with open risers) of not more than 0.75 metres in width in plots upto 83.5 square metres in area, where no staircase already exists.
- I. Change of roof with the same material without changing the height and shape of the roof.
- 2.82 "Renovation" means and includes the works on a building / house completion of which will present a new look to it including strengthening the structure of a building by way of replacement of posts, beams and supports with the same materials or mild steel I /T section and the works may or may not include alteration and erection / reconstruction. These works, however, shall not include the works of repairs / maintenance as at Byelaw No. 2.81.
- 2.83 "Road / Street" means and includes any public or private street as defined in the Act.
- 2.84 "Road / Street Level or grade" means and includes the officially established elevation or grade of the centre line of the street upon which a plot fronts and if there is no officially established grade, the existing grade of the street at its mid-points.
- 2.85 "Road / Street Line" means the line defining the side limits of a road / street.
- 2.86 "Room Height" means the vertical distance measured from the finished floor surface to the finished ceiling / slab surface. In case of pitched roofs, the room height shall be the vertical distance measured from the finished floor surface upto the mid-point of the sloping roof.

- 2.87 "Row House" means one of a series of houses, often of similar or identical façade situated side by side and or joined by common walls.
- 2.88 "**Row Housing**" means Row of houses with only front, rear and interior open space.
- 2.89 "**Set back line**" means a line usually parallel with the centre line of the road or street and laid down in each case by Board beyond which nothing can be constructed towards the plot boundary.
- 2.90 "Site" means the entire area covered by a building with out-houses and also the land at the front, rear and sides of such building and pertaining thereto any required by these bye-laws to be left open.
- 2.91 "**Smoke pipe**" means a flue approximately horizontal of metal or other material in which smoke or the products of consumption are conducted from a furnace to a chimney.
- 2.92 **"Spiral Staircase"** means a staircase forming continuous winding curve round a central point or axis provided in a open space having tread without rises.
- 2.93 **"Store or Shop"** means any store or shop in which it is not intended for habitation purpose.
- 2.94 "**Storey**" means the portion of a building included between the surface of any floor and the surface of the floor next above it, than the space between any floor and the ceiling next above it.
- 2.95 "Swimming Pool" means a wading pool, paddling pool or simply a pool in a container filled with water intended for swimming or water based recreation. The pool can be built either above or in the ground and from materials such as concrete, metal, plastic or fibre glass and comes under a definition of building being a permanent structure designed for a useful purpose.
- 2.96 "**Table**" means a table annexed to these byelaws.
- 2.97 "**Tenement**" means an independent dwelling unit with a kitchen and toilet block. The minimum size of tenement shall be 20 sq.m of carpet area
- 2.98 "To erect or Construct " means:

To erect a new building on any site whether previously built upon or not as prescribed under Section 235 of the Act.

#### 2.99 "To re-erect or Re-construct" means :-

To re-erect/reconstruct any building by way of pulling down more than half of the cubical contents, and / or more than half of the superficial area of the external walls above the plinth level and / or more than half of the number of posts or beams in the external walls of any framed building, addition to a building / house including alteration and renovation. It also includes re-erection / reconstruction of any building / house of which portions or part of it above plinth level have been destroyed by fire, storm, rain, earthquake or any act of god.

- 3.0 "Tower like structures" means a structure which shall be deemed to be tower like structures when the height of the tower like portion is atleast twice the height of the broader base at ground level.
- 3.1 "**Travel Distance**" means the distance from the remotest point on a floor of a building to a place of safety be it a vertical exit, horizontal exit or an outside exit measured along the line of travel.
- 3.2 "Unsafe Building" Means 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 / structures will require to be restored by repairs, demolition or dealt with as directed by the Cantonment Board. The relevant provisions of the Act shall apply for procedure to be followed by the Authority in taking action against such buildings.

3.3 "Verandah" means a covered area with atleast one side open to the outside with the exception of 1.0 metre high parapet on the upper floors to be provided on the open side.

- "Warehouse" means a building, the whole or a substantial part of which is used or intended to be used for the storage of goods whether for keeping or for sale or for any similar purpose, but does not include a store-room attached to and used for the proper functioning of a shop.
- 3.5 "Water closet" means a privy with arrangements for flushing the pan with water but does not include bathroom.
- 3.6 "Window" means an opening to the outside other than a door, which provides all or part of the required natural light, and ventilation or both to an interior space.
- 3.7 **"Workshop"** means a building where not more than ten technical persons are employed in any repair or light manufacturing process.

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#### CHAPTER -II

#### **BUILDING SANCTION & COMMENCEMENT CERTIFICATE**

#### 3. PROHIBITION OF CONSTRUCTION WITHOUT SANCTION:

No person shall erect or re-erect a building or make addition or alteration or renovation to any building on any land in a Cantonment:-

- 3.1 in an area, other than the civil area, except with the previous sanction of the Board:
- 3.2 in a civil area, except with the previous sanction of the Chief Executive Officer.

and without intimating about commencement of construction to the Chief Executive Officer, under Section 235 of the Act.

Provided that no such sanction issued by the Board or the Chief Executive Officer as the case may be, which lapsed under Section 243 of the Act shall be valid unless the Board or the Chief Executive Officer, on an application made before expiry of the period, thereof has allowed an extension of that period in accordance with the provisions of these byelaws and the Cantonments Act, 2006 as amended from time to time.

#### 4. BUILDING NOTICE & REQUIREMENTS:

- 4.1 The Owner / HOR / Lessee whoever intends to erect or re-erect a building or to make additions, alterations or renovation to any building in a Cantonment shall apply for sanction by giving notice in writing of his intention:-
  - 4.1.1 Where such erection or re erection is in an area other than the Civil area, to the Board:
  - 4.1.2 Where such erection or re erection is in the Civil area to the Chief Executive Officer;

in the prescribed form in **Appendix 'A' & 'A-1'** and such notice shall be accompanied by plans and statements in four copies. The plan may be ordinary prints on ferro paper azolite ammonia or any other type. Two sets of such plans shall be retained in office of the Board for record after the issue of permit or a refusal. The person giving the said notice required by Section 235 of the Act shall specify the purpose for which it is intended to use the building to which such notice relates, and mention clearly the existing use of the building.

Provided that if a building is damaged or fallen down due to earthquake, flood or fire, storm etc and any act of God, the prescribed notice is required to be given by the applicant as per Byelaw No. 40.

4.1.3 **Repairs**: A person intending to carry out repairs / maintenance of his building / house shall intimate his intention to do so in time giving details of the works as indicated at Section 2.81 of these Byelaws, which the CEO, shall cause to be inspected within 10 (ten) days of receipt of such intimation either personally or by his authorized representative(s) and after preparation of a site verification report about the veracity of the requirements given by the person, may permit to carry out the specified works.

Provided that if the person / applicant deviates such permission and undertakes works attracting the definition of erection, re-erection / reconstruction / alteration / renovation as given in these Byelaws, the Board or the CEO, as the case may be, shall take action under Section 248 of the Act.

- 4.1.4 **Compensation To Owner / HOR / Lessee**: No compensation shall be claimable by the applicant giving building notice for any damage or loss which he may sustain in consequence of the refusal of the Board to sanction the erection of any building or in respect of any direction issued by it under Sub- Section (1) of Section 238 of the Act.
- 4.1.4.1 The Board shall compensate the owner of any building for any actual damage or loss sustained by him in consequence of the prohibition of the re-erection of any building or of its requiring any land owned by him as provided for in Section 241 of the Act, or of its requiring land in consonance with the Land Use Plan prepared by the Board as per Section 233 of the Act, or in case if the plot becomes too small to construct after surrender of a portion on account of any of these proposals. The compensation for private land being determined shall be as per prevailing and applicable Standard Table of Rent (STR) for that locality wherein the land is being surrendered.

Provided further that the Board or the CEO, as the case may be, instead of paying monetary compensation, wholly or in part, may give sanction to construct the building to the affected person(s) with the same FAR, that would have been permissible before the road widening, if any portion of the plot after surrendering the set back / land is available for reconstruction.

Provided further that in case of plots held on lease, Old Grant, the compensation shall be as per terms of Old Grant / Lease as applicable.

4.1.4.2 If the owner / HOR / Lessee of any premises need to surrender a site or part of it with or without the building / house or part of it on account of implementation of infrastructure projects as a part of Urban renewal, such as, flyover, Rail/ Road overbridge, grade-separator etc., construction of Metro Rail Line, National / State Highway involving such sites and no realignment is possible to avoid such sites, Government Department / Organization who is undertaking / has undertaken to implement the project will make compensation to such persons for land / building owned by them and for authorized building / house only to HOR / Lessee. Regarding land belonging to the Central / State Government in such sites, the prevailing Central / State Government policy on transfer of land for such purposes will be applicable.

Provided further that if only a part of such a site including the building / house standing thereon will get damaged by such works, and the owner / HOR / Lessee desires to re-erect / reconstruct his building / house at the remaining portion of the subject site, the same FAR on the site will be admissible as if the entire site is available and in that case, no monetary compensation will be payable to such person(s).

4.1.5 Compensation To Nearby Owner / HOR / Lessee: The applicant shall compensate the owner / HOR / Lessee or any nearby property for the damage that may be done during erection / re-erection / alteration / renovation of his building / house and an undertaking to that effect will be submitted alongwith the notice as at Appendix 'A'. Similarly, the applicant shall compensate for any damage to any building belonging to any Government / Organization including the Board that may occur during such works done on his building / house and undertaking submitted alongwith Appendix 'A'.

- 4.2 No notice shall be valid until the information required as mentioned above at Bye Laws No. 4 to 18 and any further information and undertakings, which may be required under the Bye-laws have been furnished to the satisfaction of the Chief Executive Officer alongwith the notice.
- 4.3 **Copies of plans and statement** Normally four copies of plans and statements shall be made available along with notice . However number of copies of plans required shall be as decided by the Chief Executive Officer.
- 4.4 **Information accompanying notice-** The notice shall be accompanied by the key plan (location plan), site plans, building plan, structural plan, service plan, specifications and certificate of supervision by a qualified Architect or a Civil Engineer.
- 4.5 **Sizes of Drawings** The size of drawing shall be as specified in the table below:-

| Sr. No.    | Designation | Drawing Sheet Sizes Trimmed size mm. |
|------------|-------------|--------------------------------------|
| 1.         | A0          | 841 x 1189                           |
| 2.         | A1          | 594 x 841                            |
| 3.         | A2          | 420 x 594                            |
| 4.         | A3          | 297 x 420                            |
| 5.         | A4          | 210 x 297                            |
| <b>3</b> . | A5          | 148 x 210                            |

The Chief Executive Officer may recommend any change in the size of paper from time to time depending upon availability of paper and stationery.

- 4.6 **Coloring notations for plans** The plan shall be colored as specified in Table- 1.
- 4.7 **Dimensions** All dimensions shall be indicated in metric units.

#### 4.8 Applicability of Land Policy / Central Government Directives -

The building plans that are contrary to the prevailing Land Policy / Lease Conditions on lands held on lease / old grant conditions / directives from Min. of Defence Govt. of India in this regard shall be summarily rejected.

- 5. **Key Plan (Location Plan) -** A key plan drawn to a scale not less than 1:10000 shall be submitted alongwith the notice for sanction and commencement showing the boundary locations of the site with respect to neighbourhood landmarks.
- **6. Site Plan** -The site plan sent with an application for permission shall be drawn to a scale of 1:500 and shall show
  - a. The boundaries of the site.
  - b. The direction of the North point relative to the plan of the building.
  - c. Line diagram of existing building or structures on, over or under the site or projecting beyond it.
  - d. All existing buildings standing on, over or under the site.
  - e The name of the street in which the building is proposed to be situated, if any.
  - f. 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.
    - a. adjacent streets and buildings on adjoining plots (with number of storeys and heights and marginal open space)
    - iii. If there is no street within a distance of 12 m of the site the nearest existing street.

- g. 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).
- h. Space to be left about the building to secure a free circulation of air, admission of light and access for scavenging purpose.
- i. The width of the street (if any) in front and the street (if any) at the side or rear of the building.
- j. Any existing physical features such as wells, drains, tree etc
- k. The ground area of the whole property and the breakup of covered area on each floor with the calculations for percentage covered in each floor in terms of the total area of the plot as required under the rules governing the coverage of the area.
- I. Electric supply line, water supply and drainage line.
- m. Such other particulars as may be prescribed by the Chief Executive Officer.

#### 7. Building Plans -

- 7.1 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 sizes of rooms and the position and width of staircase, ramps and other exit ways, lift wells, lift machine room and lift pit details. It shall also include ground floor plan as well as basement plan and shall indicate the details of parking space, loading and unloading spaces provided around and within building as also the access ways and the appurtenant open spaces with projections in dotted lines, distance from any building existing on the plot in figured dimension along with necessary building.
    - \* Note To indicate in Proforma I.
  - b. show the proposed use or occupancy of all parts of the buildings along with existing use .
  - c. show exact location of essential services, for example, WC, sink, bath and the like.
  - d. include sectional drawings of the building showing all details. showing clearly, the sizes of footings, thickness of basement walls and all roof slabs and floor slabs, walls construction, sizes and

spacing of framing members. Ceiling heights and parapet height with their materials. The section should indicate the drainage and the slope of the roof and at least one section should be taken through the staircase;

- e. show all street elevations.
- f. give dimension of the projected portions beyond the permissible building line.
- g. include terrace plan indicating the drainage and the slope of the roof.
- h. give indications of the north point relative to the plans.
- i. give dimensions of doors, windows & ventilators.
- such other particulars as may be prescribed by the Chief Executive Officer.
- k. plans and sections of private water supply and sewerage disposal system if any.
- I. set back line.
- m. Submit e-copies of building plan as per format stipulated by the Board so as to use it for processing building plans by adopting suitable software applicable by the Board.

#### 7.2 Building Plans for multistoried / special buildings

For multistoried buildings which are more than 15m height and for special buildings like educational, assembly, institutional, industrial, storage and hazardous and mixed occupancies with any of the aforesaid occupancies having area more than 200 sq.m. the following additional information shall be furnished / indicated in the Building Plans in addition to the items (a) to (m) of Rule No. 7.1.

- access to fire appliances / vehicles with details of vehicular turning circle and clear motorable access way around the building upto 6m. width.
- b. size (width) of main and alternate staircases alongwith balcony approach, corridor, ventilated lobby approach.
- Location and details of lift enclosures.

- d. Location and size of fire lift.
- e. Smoke stop lobby door, where provided;
- f. refuse chutes, refuse chamber, service duct etc
- g. Vehicular parking spaces
- h. refuse area, if any
- i. Details of Building Services Air conditioning system with portion of fire dampers, mechanical ventilation system, Electrical Services, boilers, gas pipes etc.
- j. details of exits including provision of ramps etc, for hospitals and buildings requiring Special Fire Protection measures.
- k. location of generator, transformer and switch gear room
- I. Smoke exhauster system, if any;
- m. Details of fire alarm system network
- n. Location of centralized control, connecting all fire alarm system built in fire protecting arrangements and public address system etc;
- location and dimensions of static water storage tank and pump room alongwith fire service inlets for mobile pump and water storage tank.
- p. Location and details of fixed fire protection installations such as sprinklers, wet risers hose reels, drenches, CO<sub>2</sub> installation etc and
- q. Location and details of first aid, fire fighting equipments / installations.

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#### 8. STRUCTURAL PLAN & STRUCTURAL SUFFICIENCY

The structural plan should be submitted showing details of footings, plinth beams, columns, slabs with detailed designs and sizes and the same should accompany the building plan. Also the Soil Testing Certificate should be submitted from the Competent Authority.

The structural plan should be accompanied by structural sufficiency certificate in Proforma 2 duly signed by the Engineer / Structural Engineer and the owner jointly to the effect that the building is safe against various loads, forces and effects including due to natural disasters, such as earthquake, landslides, cyclones, floods etc as per Part 6 'Structural Design' and other relevant Codes. The Engineer / Structural Engineer shall also have details to substantiate his design.

Any amendments / additions to Part 6 of the National Building Code of India, 2005 issued from time to time shall be applicable.

#### 9. FIRE AND LIFE SAFETY NORMS

The Building shall be planned, designed and constructed to ensure fire safety as this shall be done in accordance with Part 4 Fire Protection of National Building Code of India.

### 10. RAIN WATER HARVESTING AND WASTE WATER RECYCLING SYSTEMS

The procedures and Rain Water Harvesting Methods to be adopted shall be by water harvesting through storing of water runoff including rain water in all new buildings on plots of 100 sq. mtrs. and above will be mandatory. The Architect should indicate in the building plans the system of storm water drainage alongwith points of collection of rain water in surface reservoirs or in recharge wells. These provisions will be applicable as per the Public Notice (s) of Central Ground Water Authority issued from time to time.

All buildings having a minimum discharge of 10000 ltrs. and above per day shall incorporate waste water recycling system. The recycled water should be used for horticultural purposes.

- (1) Effective measures shall be taken within each premises for conservation of rainwater, and rainwater-harvesting structures at least to the following standards shall be provided; the same shall be shown in the plan applied for planning permission.
- (a) Buildings of any height upto 18 Meters: -

Percolation pits of 30 centimeter diameter and 3 metres depth may be made and filled with broken bricks (or pebbles) for 2.85 metres and the top covered with perforated Reinforced Concrete Cement (R.C.C.) slab. These percolation pits may be made at intervals of 3 metres center to center along the plinth boundary. The rain water collected in the open terrace may be collected through a 150 millimetre PVC Poly Vinyl Chloride Pipe laid on the ground and may be allowed to fall in the percolation pits or into a open well through a seepage filter of 60cm x 60 cm (filter media broken bricks) provided before the open well which will improve the ground water level. A dwarf wall of 7.5 centimeter height is built across the entry and exit gates to retain water and allow it to percolate within.

b. Special Buildings, Educational Buildings, Commercial Building, Industries and Institutional Buildings: -

There shall be a pebble bed of 1 metre width and 1.5 metre depth all round the building and filled with rounded pebbles of 5 centimetres to 7.5 centimetres size. The concrete paving around the building has to be sloped at about 1 in 20 towards the pebble bed, so that rain water from the terrace and side open spaces flows over this pavement and spread into the pebble bed around. Dwarf walls in masonry of 7.5 centimetres, height shall be constructed at the entrance and exit gates to retard rainwater collected into the compound from draining out to the road.

Or

- c. Any one of the methods shown in the sketches as shown in Table 18 annexed may also be adopted depending on the conditions and type of development.
- (2) Additional regulations for all buildings:
- (a) In the ground floor, floor level of water closets shall be at least 0.9 metre above the road level to ensure free flow.
- (b) All centrally air conditioned buildings shall have their own wastewater reclamation plant and use reclaimed wastewater for cooling purposes.
- (c) A separate sump shall be constructed for storing potable water supplied by the Water Works of the corresponding Cantonment Board / Water Works Authority and Sewerage Board, the volume of sump not exceeding 1,000 litres per dwelling. This sump shall be

independent of other tanks, which may be constructed for storing water obtained from other sources.

- (3) The requirements of provisions of Rain Water Harvesting Methods shall also apply to existing buildings, which will be required to implement Rain Water Harvesting Methods as per schemes approved by the Board within a period of one year as per site conditions.
  - (a) The HOR shall deposit a Security Deposit of Rs. 25,000/- in cases of plot size 100 sq.m. to 200 sq.m. & Rs. 50,000/- in cases of plot size exceeding 200 sq.m. in the Civil Area. Further in case of Bungalow Area, the Security Deposit shall be Rs. 1,00,000/-. The Security Deposit however, shall be released by the CEO only after ascertaining of the rain water harvesting arrangements made. In case of default by the HOR, the CEO is empowered to provide the facility and recover the amount from the Security Deposit and balance amount, if any towards the provision of Rain Water Harvesting shall be recovered as arrears to Property Tax.
- (4) In order to ensure **rain water recycling**, the applicant should ensure that all downtake rain water pipes should be connected to an underground tank of adequate capacity for storage of rain water. The same should be utilized in the building for WCs, Washing Machine and gardening purpose.

#### FORM FOR CERTIFICATE FOR RAIN WATER HARVESTING

Certified that the building plans submitted for approval satisfy the water harvesting requirements as well as minimum anticipated discharge of waste water as stipulated and the information given therein is factually correct to the best of our knowledge and understanding.

Signature of owner Signature of Architect

Date Date

Name Name Address Address

\_\_\_\_\_

The various methods of Rain Water Harvesting shall be as mentioned in Table – 18.

## 11. PROVISIONS FOR DISABLED PERSONS

Provision of barrier free environment in buildings other than residential buildings for persons with disabilities.

#### 11.1 **Definitions**:-

- Non-ambulatory disabilities Impairments that, regardless of cause or manifestation for all practical purposes confine individuals to wheelchairs.
- ii. Semi-ambulatory disabilities Impairments that cause individual to walk with difficulty or insecurity. Individuals using braces or crutches, amputee, arthritis, spastics and those with pulmonary and cardiac ills may be semi-ambulatory.
- iii. Hearing disabilities Deafness or hearing handicaps that might make an individual insecure in public areas because he / she is unable to communicate or hear warning signals.
- iv. Sight disabilities Total blindness or impairment affecting sight to the extent that the individual functioning in public areas is insecure or exposed to danger.
- v. Wheel Chair Chair used by disabled people for mobility

i. Size of small wheel chair 750 x 1050 mmii. Size of large Wheel Chair 800 x 150 mm

# 11.2 Facilities to be provided

The following facilities for the disabled persons shall be provided in public building and should be shown specifically in the Building Plan (These Byelaws are not applicable to private / domestic residences)

- 11.2.1 Site Planning Level of the roads, access paths & parking areas shall be described in the plan along with specification of materials. Every building should have at least one access to main entrance / exit to the disabled which shall be indicated by proper signage. This entrance shall be approached through a ramp together with stepped entry. The ramp should have a landing after every 9 metre run and in front of the doorway. Minimum size of landing shall be 1000 x 2000 mm.
- 11.2.2 Access path / walk way Access path from plot entry and surface parking through building entrance shall be minimum 1800 mm wide having even surface without any step. Slope if any shall not have any gradient greater than 5%. Selection of floor material shall be made suitably to

attract or to guide visually impaired person (limited to floor material whose colour texture is conspicuously different from that of surrounding floor material or the material that emit different should to guide visually impaired person. Finishes should have a non-slip surface with texture traversable by wheel chair. Curbs wherever provided should blend to common level.

- 11.2.3 Parking For parking of vehicles of disabled peoples, the following provisions shall be made :
  - a. Surface parking for two Equivalent Car Space (ECS) shall be provided near entrance for the physically handicapped persons with maximum travel distance of 30 mtrs. from building entrance (one ECS = 12.5 sq.m.).
  - b. The width of parking bay shall be minimum 3.6 mtrs.
  - 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.
- 11.2.4 Building requirements The specified facilities for the buildings for disabled persons shall be as follows:
  - a. Approach to plinth level Ramp shall be provided with non-slip material to enter the building minimum clear width of lamp shall be 1800 mm with maximum gradient 1:12, between top and bottom of the ramp. Length of the ramp shall not exceed 9 mtrs. having 800 mm high hand rail on both sides extending 300 mm beyond the ramp. Minimum gap from the adjacent wall to the hand rail shall be 50 mm. Minimum clear opening for the entrance door shall be 1000 mm. Threshold shall not be raised more than 12 mm. For step approach size of tread shall not be less than 300 mm and maximum riser shall be 150 mm. Provision of 800 mm high hand rails on both sides of the stepped approach similar to the ramped approach shall be made.
  - b. Corridor connecting the entrance / exit for the disabled The corridor connecting the entrance / exit for handicap leading directly outdoors to a place where information concerning the overall use of the specified building can be provided to visually impaired person either by a person or by signs, which shall be provided as follows:-

- i. Guiding floor materials shall be provided or devices that emit sound to guide visually impaired persons.
- ii. The minimum width shall be 1500 mm.
- iii. In case there is a difference of level, slope ways shall be provided with a slope of 1:12.
- iv. Handrails shall be provided for ramps / slope ways.
- 11.2.5 Stairways Stairways with open riser and provision of nosing are not permitted in such building.
- 11.2.6 Lifts Whenever lift is required as per bye-laws, provisions of at least one lift shall be made for the wheel chair user with the following car dimensions of lift recommended for passenger lift for 13 persons capacity by Bureau of Indian Standard.

Clear internal depth 1100 mm
Clear internal width 2000 mm
Entrance door width 910 mm

- i. A handrail not less than 600 mm long at 900 mm above floor level shall be fixed adjacent to the control panel.
- ii. The lift lobby shall be of an inside measurement of 1800 mm x 2000 or more.
- iii. The Braille signage will be posted outside the lifts.
- iv. Operational details of lifts shall confirm to the National Building Code of India, 2005 (NBC) and will be the responsibility of designer as well as manufacturer.
- 11.2.7 Toilets One special WB in a set of toilet shall be provided for the use of handicapped with essential provision of washbasin near the entrance for the handicapped.
  - i. The minimum size shall be 1500 mm x 1750 mm.
  - ii. Minimum clear opening of the door shall be 900 mm and the door shall swing out / sliding type.
  - iii. Suitable arrangement for vertical / horizontal handrails with 50 mm clearance from wall shall be made in the toilet.
  - iv. The WC seat shall be 500 mm from the floor.
- 11.2.8 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 fire fighters.

It is useful to have the provisions of a refuge area, usually at the fire protected stair landing on each floor than can safely hold one or two wheelchairs.

- i.
- Hand doorways with clear opening width of 900 mm
  Have an alarm switch installed between 900 mm and 1200 mm ii. from the floor level.

#### 12. SOLAR ENERGY

The building design should preferably show provision of solar power in the proposed building though it is not obligatory for buildings on plots of sizes less than 100 sq. mtrs. An owner who adopts solar power energy / solar off grid applications in the building, which generates energy will be entitled to rebate in the property taxes. The Energy Audit Report should be submitted every three years from the Competent Authority / Accredited agencies registered with Ministry of Renewable Energy to prove that energy consumption is brought down.

On submission of Energy Audit Report the rebate on Property Tax will be valid for 3 (three) years coinciding with the period of triennial assessment. The amount of rebate will be decided by the Board on case to case basis.

The following exemptions shall be applicable:-

- i. Solar installations on top of buildings will be exempted from building height.
- ii. Storage arrangements / battery room for solar energy not exceeding 4 sq.mtr. area shall be exempted from builtup area / FAR calculations.

**Note:** The building plan should show the location of the system and any other special features proposed such as water heating systems, solar power arrangements, shading control devices etc.

## 13. SERVICE PLAN -

Plans, elevations and sections of private water supply, sewerage disposal system and details of building services, where required by the Chief Executive Officer shall be made available on a scale not less than 1:100.

#### 14. SPECIFICATIONS -

Specifications of the proposed structures to be submitted in the forms set forth in **Appendix B** duly signed by a qualified Architect or Civil Engineer shall accompany the notice.

## 15. CLEARANCE CERTIFICATE FOR TAX ARREARS -

The notice shall also be accompanied by an attested copy of clearance certificate from the Revenue Department of the Cantonment Board in token of having paid the tax arrears, if any.

## 16. SIGNING OF PLANS -

All the plans shall be duly signed by the owner or a Holder of Power of Attorney and the licenced Architect / Civil Engineer / Structural Engineer as the case may be and shall indicate their names, addresses and licence numbers allotted by the Board.

## 17. NO OBJECTION CERTIFICATE -

In case of requirement of statutory clearance for certain occupancies requiring clearance from the Authorities like Civil Aviation Authorities, Railways, Directorate of Industries, State Government Prevention of Water Pollution Board, District Magistrate, Inspectorate of Boiler & Smoke Nuisance, Chief Inspector of Factories etc, the relevant No Objection Certificates from the Authority shall be obtained by the applicant at his own cost and such certificate shall also accompany the Building Application.

#### 18. SUPERVISION -

The notice shall be further accompanied by a certificate of supervision in the prescribed form given in **Appendix C**' by the licensed Architect /Engineer/Structural Engineer as the case may be. In the event of the said licensed technical personal ceasing to be employed for the development work, the further development work stand suspended till a new licensed technical personnel ceasing to be employed for the development work, the further development work stand suspended till a new licensed technical person is appointed and his certificate of supervision along with a certificate for the previous work erected (either from the old Architect or new) accepted by the Chief Executive Officer.

# 19. SANCTION OR REFUSAL OF PLANS-

- 19.1 **Validity of Building Notice** No notice shall be valid until the information required as mentioned above at Byelaw No. 4 and any further information and undertakings, which may be required under the Bye-laws have been furnished to the satisfaction of the Chief Executive Officer alongwith the notice.
- 19.2 The Board or the Chief Executive Officer, as the case may be, either sanction or refuse to sanction the plans for erection or re-erection as the case may be, of the building, or may sanction it either absolutely or subject to such directions as its thinks fit and shall communicate the Board's/his decision to the person giving the notice. The refusal for building sanction shall be communicated in the prescribed form in Appendix D giving reasons for such refusal. The sanction and permit to

commence the work shall be communicated in the prescribed form in Appendix E.

## 20 REVOCATION OF SANCTIONED BUILDING PLANS:

20.1 **Giving false information in application**: The Board /Chief Executive Officer, as the case may be, may revoke any building sanction issued under the provisions of these byelaws, if it comes to notice at any stage that there has been false statement or misinterpretation of material fact in the application on which the building sanction was based, and the whole work executed on the basis of such as sanction shall be treated as unauthorized and an order to revoke the sanction shall be passed.

Provided that no such order shall be passed without giving a reasonable opportunity to the applicant of being heard. In case of revocation of sanction, no compensation shall be payable.

- 20.1.1 **Stoppage of unauthorized constructions –** The Chief Executive Officer may issue orders for stoppage of unauthorized construction, if the same are continued with, while appeal against orders for revoking sanction are being considered.
- 20.2 **Deviations during construction –** If during the construction of a building any departure which is not of a substantial nature from the sanctioned Plan is intended to be made by the applicant by way of addition which does not violate any provisions regarding general building requirements, structural stability and fire safety requirements of the rules, alteration may be made and sanction of the Board/Chief Executive Officer shall be obtained immediately and before commencement of such deviations and in any case before application for occupation certificate and the procedure laid down for original plans shall apply to all such amended plans.

Provided further that if any such alteration are likely to result in increasing the number of tenements, the built-over area /FAR or change in the marginal open spaces or the height of the building, no such deviations shall be carried out without prior sanction.

If deviations to sanctioned plan is made during construction, which will materially alter the sanctions and FAR restrictions etc. get violated, the CEO shall revoke the sanction accorded and issue a notice to stop such construction and initiate action under Section 248 of the Act.

# 21. PROCEDURE DURING CONSTRUCTION -

21.1 Neither the granting of the permission nor the approval of the drawings and specifications nor inspections made by the Chief Executive Officer/staff of the Cantonment Board during erection of the building shall

in any way relieve the owner of such building from full responsibility for carrying out the work in accordance with the requirements of these Byelaws.

- 21.2 **Notice for commencement of work-** Within two years from the date of issue of sanction, the applicant shall commence the work for which the building sanction has been issued as provided for at Section 243 of the Act. The applicant shall give notice to the Chief Executive Officer of his intention to start work on the building site in the proforma given in Appendix F.
- 21.3 **Documents at site-** Where tests of materials are made to ensure conformity with the requirements of the rules records of the test data shall be kept available for inspection during the construction of the building and for such a period thereafter as required by the Chief Executive Officer.

The person to whom a building permission is issued shall during construction keep-

- a. Pasted in a conspicuous place on the site in respect of which the permission was issued, a copy of the building permission and approved plans.
- 21.4 Checking of plinth/column upto plinth level The applicant shall give notice in the form of Appendix G to the Chief Executive Officer after completion of work upon plinth level with a view to enable the Chief Executive Officer to ensure that the work is carried out in accordance with the sanctioned plans. The Chief Executive Officer or anyone authorized by him shall carry out inspection within 10 days from the date of receipt of such notice and give permission in the proforma given in Appendix G-1, for carrying out further construction work as per sanctioned plans or further construction may not be allowed if construction at site is found not to be as per the sanctioned plan. In case the permission is not refused or no intimation is given to the applicant, within the above period the permission/sanction shall be deemed to have been given.
- 21.5 Completion certificate The applicant through the licensed architect, engineer, structural engineer as the case may be who has supervised the construction shall give notice under Section 242 of the Act to the Chief Executive Officer regarding completion of work described in the building permission in the prescribed form given in Appendix H. The completion notice shall be submitted in the prescribed form in four sets with completion plans. One of the sets, duly certified as Completion Plan shall be returned to the owner along with the issue of the completion certificate as prescribed under Section 246 of the Act.

- 21.5.1 Registration of Sale Deed In case of sale deeds registered for buildings constructed as condominiums, apartments, cooperative housing societies etc, the individual undivided share of each owner of a flat / commercial purposes vis-à-vis the total land should be specified. The draft copy of the sale deed should be got approved by the Chief Executive Officer before its execution. It is obligatory on the part of the owner to comply with the same without which, the occupancy certificate will not be issued and the names will not be entered into the records of the Board for assessment purpose.
- 21.6 Occupancy certificate The Board/Chief Executive Officer, on receipt of the completion certificate shall inspect the work and sanction or refuse an occupancy certificate, in the proforma given in Appendix I within 30 days from the date of receipt of completion certificate after which period it shall be deemed to have been approved by the Board/Chief Executive Officer for occupation provided the building has been constructed as per the sanctioned plans. Where the occupancy Certificate is refused, the reasons shall be quoted for rejection at the first instance itself.
  - 21.6.1 Part occupancy certificate Upon the request of the holder of the building permission giving specific circumstances for such a request, the Chief Executive Officer may issue a part occupancy certificate for a building or part thereof, before completion of the entire work or part thereof as per building permission provided sufficient precautionary measures are taken by the holder of the building permission to ensure public safety and health safety. The part occupancy certificate shall be given by the Chief Executive Officer quoting the special circumstances subject to the owner indemnifying the authority as per the proforma given in Appendix J.
- 21.7 Verification of work in stages The Chief Executive Officer and the technical staff of the Board shall have the power to carry out inspection of the work at various stages for ascertaining the progress as per plan sanctioned.
- 21.8 **Connection to Cantonment Sewer Lines** No connection to the Cantonment Sewer Line for the building shall be made without the prior permission of the Chief Executive Officer and without obtaining the occupancy / completion certificate.
- 22. QUALIFICATION & COMPETENCE OF THE ARCHITECT / CIVIL ENGINEER / STRUCTURAL ENGINEER

Architects, Engineers & Structural Engineers referred to in these Byelaws are required to have a licence issued Competent Authority to carry out various works as mentioned in these Byelaws. The qualifications and procedure for licensing the Architect, Civil Engineer, Structural Engineer & Supervisor shall be as given in Appendix K and L.

## 23. INSPECTION -

The Chief Executive Officer and the technical staff of the Board shall have the power to carry out inspection of the work at various stages to ascertain whether the work is proceeding as per the provisions of rules and sanctioned plan. The Cantonments Act 2006 (41 of 2006) or as amended from time to time, shall apply for further action to be taken by the Board/Chief Executive Officer arising out of the inspection carried out.

23.1 The HOR/ Lessee / Owner should submit self attestation letter duly countersigned by the Architect along with the photographs to ensure that the work in progress at every floor level adheres to the plan sanctioned. The Architect shall be responsible to ensure that submission of any plans / documents to the Board in respect of proposed construction / work in progress is as per site conditions and any factual in-correctness / mis-representation of facts and instances shall be reported to the Council of Architecture for punitive action.

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#### CHAPTER III

#### GENERAL BUILDING REQUIREMENT

## 24. REQUIRMENTS OF SITES -

- 24.1 No piece of land shall be used as a site for the construction of building
  - a. If the Board / Chief Executive Officer considers that the site is insanitary and declared so by a committee formed under Section 142 of the CA 2006 or that it is dangerous to construct a building on it
  - b. if the site is not drained properly or is incapable of being well drained.
  - c. If the owner of the building has not shown to the satisfaction of the Chief Executive Officer all the measures required to safeguard the construction from constantly getting damped.
  - d. If the building is for assembly use or cinemas and theatres as well as for public worship which has not been previously approved by the Chief Executive Officer except in cases of special Leases and Freehold properties.
  - e. If the building is proposed on any area filled up with carcasses, excreta, filthy and offensive matters till the production of certificate from the Health Officer to the effect that it is fit to build upon from health and sanitary point of view.
  - f. If the proposed use of the said site is for a purpose which in the opinion of the Chief Executive Officer will be a source of annoyance to the health and comfort of the inhabitants of the neighbourhood.
  - g. If the building is proposed on a sanitary fill site, wherein the site has been used for dumping / trenching, municipal garbage, then construction of the building will be permitted only after obtaining clearance certificate from the Competent Authority.
- 24.2 **Distance of site from electric lines** No verandah, balcony or the like shall be allowed to be erected or re-erected or any addition or alterations made to a building on a site within the distance quoted below in accordance with the current Indian Electricity Rules and its amendments from time to time between the building and any overhead electric supply line.

| Sr. | Type of lines                                   | Vertically  | Horizontally  |
|-----|---|---|---|
| No. |   | (in metre)  | (in metre)  |
| a.  | Low and medium voltage lines and service lines. | 2.5   | 1.2   |
| b.  | High voltage lines upto and including 33,000 V  | 2.0<br>(Plus 0.3 m for every<br>additional 33,000 V<br>or part thereof) | 3.7<br>(Plus 0.3 m for every<br>additional 33,000 V<br>or part thereof) |

The minimum clearance specified in clause above shall be measured from maximum sag for vertical clearance and from maximum deflection due to wind pressure for horizontal clearance.

The Architect should specify the distance of the building from the electric lines and submit requisite clearance / No Objection from the Competent Electrical Authority along with the building application if the distances are less than those prescribed in the table above.

# 25. MEANS OF ACCESS -

- 25.1 Every building / plot shall abut on a public or internal means of access as required in these Byelaws.
- 25.2 Every person who erects a building shall not at any time erect or cause or permit to erect any building, which in any way encroaches upon or diminishes the area set apart as means of access.

# 25.3 No construction over means of access -

- 14.3.1 No person who is permitted to erect a building shall 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.
- 14.3.2 If any structure or fixture is erected upon a means of access so as to reduce its width, the Chief Executive Officer shall remove the same and recover the expenses incurred thereof from the owner.

# 25.4 **Pathways**

The approach to the buildings from road / street/ internal means of access shall be through paved pathway of width not less than 1.5 m provided its length is not more than 20 m from the main / internal means of access, provided that there is a minimum set back of 1 metre between the edge of the pathway and front wall of the building.

25.4.1 The length of main means of access shall be determined by the distance from the farthest plot (Building) to the public

street. The length of the subsidiary access way shall be measured from the point of is origins to the next wider road on which it meets. Provided that in the case of a U loop the length shall be considered as half the length of the loop.

- In the interest of general development of an area the Board may require the means of access to be of larger width than that required under Byelaw No. 25.4.
- 25.4.3 Means of access shall be leveled, metal lid, flagged, paved, severed, drained, channeled, lighted, laid with water supply line and provided with trees for shade to the satisfaction of the Chief Executive Officer free of encroachment by any structure of fixture so as not to reduce its width below the minimum required under Byelaw No. 25.4 and shall be maintained in a condition to the satisfaction of the Chief Executive Officer.
- 25.4.4 If any structure or fixture is set upon a means of access so as to reduce its width below the minimum required, the Chief Executive Officer may remove the same further and recover the expenses so incurred from the owner.
- 25.4.5 Access from Highways/Important Roads No premises other than Highway amenities like petrol pumps, motels etc. shall have an access direct from highways and such other roads having a width of 30 mtrs. or more. The above will be subject to the provisions of State Highway Act 1955, National Highway Act, 1958 and any amendments issued thereto from time to time.

Provided that in suitable cases, the Board may suspend the operation of this Byelaw till service roads are provided.

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#### CHAPTER - IV

# 26. OPEN SPACES, AREA AND HEIGHT LIMITATIONS:

- 26.1 **Exterior open spaces –** The height, floor, minimum front set-back and the minimum set-backs on the remaining three sides of a building shall be as per Table 2 for all the areas of the Cantonment.
  - 26.1.1 **Building abutting two or more streets** When a building abuts two or more streets, the set backs from the streets shall be such as if the building was fronting each such street.
  - Open spaces separate for each building or wing The space required under these byelaws shall be separate or distinct for each building and where a building has two or more wings, each wing shall have separate or distinct open space according to these byelaws for the purpose of light and ventilation of the wings.

However in case of single storeyed accessory building to residential building, the separation between buildings shall not be less than 1.5 metres.

Provided that if the size of the plot is so small, say 25 sq. mtrs., as not to allow application of norms of set-backs (i.e. no structurally sound house / feasible building that can be built on the left out area), the CEO shall decide as to what minimum set-backs has to be there if the applicant applied for reconstruction / addition / alteration on such sites keeping in view locations, road widening scheme of the Cantonment Board in that locality.

26.2 **Interior open spaces (chowk)-** Inner chowk. The whole of every room excepting bath, water closet and store room and abutting on either the front, rear or side/s open spaces shall abut on an interior open spaces (inner chowk) whose minimum width shall be 3 metres.

Further such inner chowk shall have an area at all levels of chowk of not less than the square of the 1/5<sup>th</sup> the height of the highest wall abutting the chowk. Provided that when any room (excluding staircase way) and bathroom and water closet is dependent for its light and ventilation on an inner chowk the dimension shall be such as is required for each wing of the building.

Where only water closet and bathroom are abutting on the interior open space, the size of the interior open space shall be in line with the provisions for ventilation shaft as given in Byelaw No. 29.14.

Outer chowk- The minimum width of outer chowk (as distinguished from its depth) shall be not less than 2.4 metres. If the width of the outer chowk is less than 2.4 metres then it shall be treated as a notch and the provisions of outer chowk shall not apply. However, if the depth of outer chowk is more than the width, the provisions of clause (c) shall apply for the open spaces to be left between the wings.

# 26.3 Floor Area Ratio & Height limitations -

- 26.3.1 The area and height limitations through covered area, height of building and number of storeys permitted, tenements density and floor area ratio shall be as given in **Appendix M**.
- 26.3.2 Notwithstanding any foregoing provisions, the height of a building shall not be more than 15 metres for all the areas of the Cantonment.

# 26.4 Exemption to Open Spaces / Covered Area:

- a. Projections into open spaces Every open space provided either interior or exterior shall be kept free from any erection thereon and shall be open to the sky and no cornice, chajja roof or weather shade more than 0.75 m wide shall overhang or project over the said open space so as to reduce the width to less than the minimum required. However, , sloping chajja provided over balcony / gallery etc. may be permitted to project 0.3 m beyond balcony projection at an angle of 30 from horizontal level;
- b. A canopy not exceeding 5 m in length and 2.5 m in width in the from of cantilever and unenclosed over the main entrance providing a minimum clear height of 2.1 m below the canopy also be permitted in the open space. The canopy shall not have access from upper floors ( above floors). There shall be a minimum clearance of 1.5 m between the plot boundaries and canopy.
- c. In Residential buildings, a balcony or balconies at roof level above floor (including stilt floor) of a width of 1.2 m from building line (measured perpendicular to the building line) to the outer most line of balcony may be permitted over hanging set backs within one's own land and courtyards and this shall be subject to a maximum of 1/3 length of per meter of building and 10% of the floor area of

- each floor. Balcony shall be permitted to project to marginal open space of not less than 3 m in width.
- d. that when the balconies are enclosed 1/3<sup>rd</sup> of the area of their faces shall have louvers or grills shall have glazed shutter.
- e. that at no time dividing wall between the balcony and the room shall be removed. Removal of the dividing line will amount to increase in builtup area calculation and will violate the FAR. Also, if the original façade as depicted in the sanctioned plan is changed by entirely covering the balcony with any type of building materials, the same shall amount to increase in the builtup area and will violate the FAR.
- 26.4.1 **Accessory building** The following accessory building may be permitted in the marginal open spaces.
  - a. In an existing building a single storeyed sanitary block subject to a maximum area of 4 sq.m in the rear and side open space and at a distance of 7.5 m from the road line or the front boundary and 1.5 m from other boundaries may be permitted where facilities are not adequate. The Authority may reduce the 1.5 m margin in exceptional cases to avoid hardships.
  - b. Parking lockup garage not exceeding 2.4 m in height shall normally be permitted in the rear corner of the plot. Provided that in exceptional cases, where the side of rear open spaces at a distance of 7.5 m from any road line or the front boundary of plot. Parking lockup garage when attached main building shall be 7.5 m away from the road line and shall be of such construction given by fire resistance of 2 hours.

**Note**: The areas of sanitary block and parking lockup garages shall be taken into account for the calculation of FAR and covered area calculations, except that the area of one garage per plot, shall not be counted within the maximum ground coverage permissible.

c. Suction tank, pump room.

# 26.4.2 **Height Exemptions** –

- a. The following appurtenant structures shall not be included in the height of the building:Roof tanks and their supports, ventilating, air conditioning, lift rooms and similar service equipment stair cover, chimneys and parapet walls and architectural features not exceeding 1 m in height.
- b. The height of stilt floor shall not be counted in the overall height of the building.

## 27. EXEMPTIONS FOR FAR AND BUILT UP AREA CALULATIONS -

The following shall not be included in covered area for FAR and built up area calculations:-

- a. A stilt or basement or cellar space or basements under a building constructed on stilt and used exclusively for the following provisions mentioned below shall be exempted from builtup area calculations / FAR as per the maximum areas stipulated below:
  - i. Parking spaces entire area
  - ii. Air conditioning equipment & other machine rooms used for services & utility of the building not exceeding 5.0 sq.m.
  - iii. Toilets not exceeding 2.0 sq.m.
  - iv. Urinals not exceeding 2.0 sg.m.
  - v. Security guard room not exceeding 5.0 sq.m.

If any of the basement/s is used for purposes other than those mentioned above shall be counted for builtup area calculation / FAR.

- b. Stilt floor, open from all sides and reserved for parking.
- c. Parking floor in a building where there is no provision for a stilt floor.
- d. Electric cabin or substation of maximum size of 1.5 sq. metres / with minimum width or diameter of 1.2 metres pump house, garbage shaft, space required for location of fire hydrants, electric fitting and water tank.
- e. Projection as specifically exempted under the Byelaw No. 26.4.
- f. Staircase room and/or lift room above the topmost storey, architectural features, chimneys and elevated tanks of dimension as permissible under these byelaws.

- g. Staircases from ground level to the topmost storey of the building.
- h. Shafts provided for lift at all levels of the building.
- One room admeasuring 2 metres X 3 metres on the ground floor of co-operative housing societies or apartment owner's co-operative societies.
- j. Rockery, well and wall structure, plant nursery platform round a tree, tank, fountain bench, chabutra with open top and unenclosed sides by walls, ramps, compound wall, gate, slide, swing, overhead water tank on top of buildings.
- k. Storage arrangement / battery room for solar energy not exceeding 4 sq.m
- I. Overhead RCC water storage tanks on top of buildings.
- m. No exemptions shall be made for FAR and builtup area calculations in respect of construction of accessory buildings pertaining to swimming pool such as water purification plant, bathrooms, lockup rooms and other units pertaining to the swimming pool whether covered or not.
- n. Swimming pool, provided it is uncovered.
- **28. PARKING SPACES** The provisions for parking motor vehicles shall be as in Table No.3. No parking will be provided, for on the streets or roads.
  - a. Off-street parking space shall be provided with adequate vehicular access to a street and the area of drives, aisles and such other provisions required for adequate maneuvering of vehicles shall be exclusive of the parking space stipulated in these byelaws.
  - b. If the total parking space required by these byelaws is provided by a group of property owners for their mutual benefit, such use of this space may be constructed as meeting the off street parking requirements under these byelaws subject to approval of the Board/Chief Executive Officer. In such cases, the details of requirements for total development should be submitted if a common parking space is proposed for the group buildings, and the owners of such buildings shall submit the layout showing such reservation of parking space and also a registered undertaking that the area earmarked for the parking space will be kept unbuilt and will be developed as a parking lot.

- c. In addition to the parking space provided, for building of mercantile (commercial) like office, markets, departmental stores, industrial and storage, loading and unloading spaces shall be provided at the rate of one space for each 1000 sq. metres of floor area or fraction thereof exceeding the first 200 sqm of floor area. Each such loading and unloading space shall not be less than 3.75 metres X 7.5 metres.
- d. Parking lockup garages shall be included in the calculations of floor space for FAR calculations unless they are provided in the basement of a building or under a building constructed on stilts with no external walls.
- e. The parking space in cinema theatres, place of public assembly shall be as provided in Table No.3.
- f. The spaces to be left out for parking as given in clause (a) and (b) shall be in addition to the open spaces left out for light and ventilation purpose as given in Byelaw No.26.

However, one row of car parking must be provided in the front open space of 12 metres without reducing the clear vehicular access way to less than 6 metres.

- g. Stilt floor in a building, open from all sides.
- A floor in a building, either ground or any other floor open from all sides reserved for parking but where no provision of stilt floor is made.
- i. Further 50 percent of the open space required under this byelaw around buildings except those in front and the recreational or amenity open space, may be allowed to be utilised for parking, provided that a minimum distance of 3.6 metres around the building shall be kept free from any parking, loading or unloading spaces.

## 29. REQUIREMENTS OF PARTS OF BUILDINGS-

29.1 **Main Building** – The plinth of any part of a building or out houses shall be so located with respect to surrounding ground level that adequate drainage of the site is assured. The height of the plinth shall not be less than 450 mm from the surrounding ground level. In case of special housing schemes put up by public agencies for low-income group and economically weaker sections of society, the plinth height may be allowed to be reduced to 30 centimeters.

29.1.1 **Interior courtyards** – Every interior courtyard shall be raised at least 15 centimeters above the surrounding ground level and shall be satisfactory drained.

## 29.2 Habitable rooms -

29.2.1 **Size** – No habitable room shall have a floor area of less than 9.5 sq. metres except those in the hostels attached to recognized educational institutions, the minimum size of the habitable room for the residents of a single person shall be 7.5 sq. metres. The minimum width of a habitable room shall be 2.4 metres. One full side of the habitable room in which windows for minimum light and ventilation are provided shall abut on the required open space. In a two roomed tenement, one room shall be not less than 9.5 sq. metres and other 7.5 metres.

In the case of special housing schemes for low income group, economically weaker sections of the society, the size of single room tenement shall be not less than 12.5 sq.mtrs. with a minimum width of 2.4 mtrs.

- Height- The height of all rooms for human habitation including that of kitchen shall not be less than 3.0 metres measured from the surface of the floor to the lowest point of the ceiling (bottom of slab). In case of centrally airconditioned building, height of the habitable room shall not be less than 2.75 metres measured from the surface of the floor to the underside of the slab or to the underside of the false ceiling. The minimum clear headroom under beam shall be 2.4 metres.
  - 29.2.2.1 In the case of pitched roof the average height shall not be less than 2.75 metres and the minimum height of eaves level shall not less than 2.1 metres.
  - 29.2.2.2 However, the maximum room height shall be 4.2 metres in case of all building excepting Residential Hotels of the category of three stars and above, Assembly, Institutional, Educational, Industrial, Hazardous and storage occupancies, and in case of portions common to two floors of duplex flats.

Duplex flats shall mean a residential flat divided on two floors with an internal staircase connecting the two floors.

Provided that the maximum height of all buildings in the Cantonment shall be restricted to 15 metres.

## 29.3 Kitchen -

- 29.3.1 **Size** (1) The area of the kitchen shall be not less than 5.5 sq. metres and a width of 1.8 metres. A kitchen which is also intended for use as a dining room shall have a floor area of not less than 9.5 sq. metres with a minimum width of 2.4 metres.
- In the case of special housing schemes, provision for kitchen may not be insisted. In the case of double room tenements, the size of kitchens shall not be less than 4.0 sq. mtrs. with a minimum width of 1.5 m. Where alcoves (cooking space having direct access from the main room without any inter communicating door) are provided, the size shall not be less than 3.0 sq. mtrs. with a minimum width of 1.5 mtrs.
- 29.3.3 Other requirements Every room to be used as kitchen shall also have
  - i. A height of not less than 2.75 metres.
  - ii. A small flue which shall have a superficial area for emission of smoke of not less than 0.5 sq. metres opening or any other form of smokeless chulla.
  - iii. A window of not less than 0.90 sq. metres superficial area.
  - iv. Unless separately provided for in a pantry, means for the washing up of kitchen utensils which shall lead directly or through a sink to a grated and trapped connection to the waste pipe.
  - v. An impermeable floor and an impermeable dado 0.90 metres high; and
  - vi. Fly-proof gauze covering all doors and windows except where a cooking place is provided in a verandah of single living room tenement.

vii. In case of multi-storied residential buildings more than 15 m. in height, refuse chutes.

#### 29.4 Bathrooms and water closets -

- 29.4.1 **Size-** The size of a bathroom shall be not less than 1.8 sq.metres with a minimum width of 1.2 metres. The minimum size of water closet shall be 1.1 sq. mtrs with a minimum width of 0.9 mtrs. If it is a combined bathroom and water closet, the minimum area shall be 2.8 sq. metres with the minimum size of 1.2 metres.
- 29.4.2 **Height** The height of bathroom or water closet measured from the surface of the floor to the lowest point in the ceiling (bottom of slab) shall be not less than 2.2 mtrs.
- 29.4.3 **Other requirements** Every bathroom or water closet shall :-
  - a. be so situated that at least one of its walls shall open to external air with the size of opening (windows, ventilators, louvers) not less than 0.3 sq.mtrs in area and side not less than 0.30 cms
  - b. not be directly over or under any room other than another latrine; washing place, bath or terrace.
  - c. have the platform or seat made of watertight nonabsorbent material.
  - d. be enclosed by wall or partitions and surface of every such wall or partition shall be finished with a smooth impervious material to a height of not less than 1 mtr above the floor of such room ... and
  - e. be provided with an impervious floor covering, sloping towards the drain with a suitable grade and not towards verandah or any other room
  - f. No room containing water closet 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.

#### 29.5 **Loft** –

- a. The maximum height of a loft shall be 1.5 metres and the loft may be provided over residential kitchens, bathrooms, corridors and over shop floors built up to an area 25 percent over kitchens and full space of bathrooms, water closets and corridors. In shop of any width, lofts upto 25% of the covered area may be provided
- b. The clear headroom under the loft shall not be less than 2.2 metres.

# 29.6 Ledge or Land -

- 29.6.1 Size A ledge or land in a habitable room shall not cover more than 25 percent of the area of the floor on which it is constructed and shall not be deemed to interfere with the ventilation of the room under any circumstance.
- 29.6.2 Height The clear headroom below the ledge shall not be less than 2.2 mtrs.
- 29.6.3 The projections (cantilever) of Cupboards and shelves may be permitted and would be exempted from covered area calculations, Such projections may, project upto 60 centimeters in the setbacks for residential buildings provided the width of such cup-board/shelves does not exceed 2.4 metres and there is not more than one such cup-board/shelf in each room.

#### 29.7 Mezzanine floor –

- 29.7.1 Size The aggregate area of the mezzanine floor shall not exceed 33 1/3 percent of the built up area of that floor. The minimum size of a Mezzanine floor if it is used as a living room shall not be less than 9.5 square meters.
- 29.7.2 Height The minimum height of mezzanine floor shall be 2.2 metres. The headroom under mezzanine floor shall not be less than 2.2 metres.
- 29.7.3 Other requirements A mezzanine floor may be permitted provided that -.
  - a. It confirms to the standards of livings rooms as regards lighting and ventilation in case the size of mezzanine floor is 9.5 Sq m or more.

- b. It is so constructed as not to interfere under any circumstances with the ventilation of the space over and under it.
- c. Such mezzanine floor or any part of it shall not be used as a kitchen and
- d. In no case a mezzanine floor shall be closed so as to make it liable to be converted into unventilated compartments.

#### 29.8 **Store room –**

- 29.8.1 Size The area of a storeroom provided in residential buildings shall not be more than 3 sq. metres where light, ventilation and height are provided at special standards lower than as required for living rooms.
- 29.8.2 Height The height of a storeroom shall not be less than 2.2 metres.

# 29.9 **Garage –**

- 29.9.1 Garage Private The size of private garage in residential building shall be not less than 2.5 metres X 5 metres. The garage if located in the side open space shall not be constructed within 1.5 metres from the main building.
- 29.9.2 Garage Public –Parking places in public buildings open from all sizes and having only roofs at top shall be exempt both from built up area and FAR calculations.
  - a. Height The maximum head room in a garage and parking area shall be 3.0 metres.
  - The plinth of a garage located at ground level shall not be less than 15 centimeters above the surrounding ground level.
  - c. The garage shall be set back behind the building line for the street/road on to which the plot abuts, and shall not be located affecting the access ways to the building. If the garage is not set back as aforesaid, the Chief Executive Officer may require the owner or occupier of the garage to discontinue use of premises or to taken such measures as the Chief Executive Officer may consider necessary in order to prevent danger or obstruction to traffic along the street.

29.9.3 **Corner site-** When the site fronts on two streets, the frontage would be as on the street having the larger width. In cases where the two streets are of the same width, then the larger depth of the site will decide the frontage and open spaces. In such cases the location of a garage in a corner plot if provided within the open spaces shall be located diagonally opposite the point of intersections.

## 29.10 Roofs -

- 29.10.1 The roof of a building shall be so constructed or formed as to permit effectual drainage of the rain-water therefrom by means of sufficient rain water pipes of adequate size, whatever required so arranged, jointed and fixed as to ensure that the rain water is carried away from the building without causing damages in any part of the walls or foundation of the buildings of those of an adjacent buildings.
- 29.10.2 The Chief Executive Officer may require rain –water pipes to be connected to a drain or sewer through a covered channel formed beneath the public footpath to connect the rainwater pipe to the road gutter or in any other approved manner.
- 29.10.3 Rain water pipes shall be affixed to the outside of the walls of the building or in recesses or chases out or formed in such walls or in such other manner as may be approved by the Chief Executive Officer.
- 29.10.4 Terrace of buildings shall not be sub-divided and it shall have only common access.

#### 29.11 Basement -

- 29.11.1 Basement may be constructed within the prescribed set backs and prescribed building lines and subject to a maximum coverage of floor 1 (entrance floor). One level basement shall not be calculated for FAR purposes.
- 29.11.2 The basement exempted from FAR /builtup area calculations may be put to any of the following uses of areas not exceeding mentioned against each:
  - a. Parking spaces and garages entire area
  - b. Air conditioning equipment and other machines used for services and utilities of the building not exceeding 15.0 sq. mtrs.

- c. Toilets
- d. Urinals
- 29.11.3 Other Requirements of Basement -The basement shall have the following requirements
  - a. Every basement shall be in every part at least 2.4 metres in height from the floor to the underside of the roof slab of ceiling.
  - b. Adequate ventilation shall be provided for the basement. The standard of ventilation shall be 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 system etc.
  - c. The minimum height of the ceiling of any basement shall be 0.90 metres and maximum 1.2 metres above the average surrounding ground level.
  - Adequate arrangement shall be made so that surface drainage or drainage water does not enter the basement.
  - e. The walls and floors of the basement shall be water tight and be so designed that the effect of the surrounding soil and moisture if any, are taken into account in design and adequate dam proofing treatment is given.
  - f. The basement shall not be partitioned.
  - g. Adequate protection against fire shall be provided. The roofs separating the basement and the floor above shall be constructed of a material like R.C.C or of such materials which will provide resistance against fire at least two hours. Where a basement is permitted apartment houses (residential flats) and hotels the owner shall display the basement plant at the entrance. Thimcles shall be provided in the roof of the basement and their positions clearly indicated on the plan. One fire extinguisher for every 30 sq. metres of basement area or part thereof shall be provided.

- h. The walls and floors of the basement shall be watertight and shall be so designed that the hydraulic pressure or the sub-soil water level is fully offset.
- i. Necessary arrangement required to prevent conditions of moisture on walls shall be made.
- j. No place in basement shall be more than 20 metres away from the exit.
- k. The access to the basement shall be separate from the main and alternate staircase providing access and exit from higher floors. Where the staircase is continuous in case of building served by more than one staircase the same shall be of enclosed type serving as a fir 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) above.

# 29.12 **Chimneys** -

a. Chimneys, where provided shall conform to the requirements of I.S. 1643-1960 Indian standards code of practice for fire safety of building (General) chimneys, frame, flue pipes and heaths.

b. The chimneys shall be built at least 0.9 metres above the top of the roof provided the top chimney shall not be below the tops of adjacent parapet wall. In case of sloping roof the chimney shall not be less than 0.6 metres above the ridge of the roof in which the chimney penetrates.

# 29.13 Lighting and ventilation of rooms:

- a. All habitable rooms including kitchen shall have for the admission of light and air, one or more apertures, such as windows and fan lights, opening directly to the external air into an open verandah not less than 2.4 metres in width. In case light and ventilation to habitable space are through, an internal courtyard, the minimum dimension of such courtyard shall not be less than 3.0 m x 3.0 m for buildings upto 10 mtrs. in height.
- b. Where the lightning and ventilation requirements are not met through daylight and natural ventilation the same shall be ensured through artificial lightning and mechanical ventilation as per part VIII Building Service Section I lightning and ventilation of National Building Code of India as amended from time to time published by the Indian Standard Institution. The latest version of the National Building Code of India shall be taken into account at the time of enforcement of these byelaws.
- c. The minimum aggregate area of opening of habitable room and kitchens excluding doors, shall be not less than 1/8<sup>th</sup> of floor area.
- d. No portion of a room shall be assumed to be lighted if it is more than 8.5 metres from the opening assumed for lighting that portion.
- e. In residential lodging hotels, where attached toilets are provided mechanical ventilation system should be installed.

#### 29.14 Ventilation Shaft

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

| Height of Building (in m) | Minimum area of ventilation shaft (in sq.m.) |     |
|---------------------------|--|-----|
| Upto 12                   | 3.0  | 1.5 |
| 18                        | 4.5  | 1.0 |
| 20                        | 6.0  | 1.8 |

# 29.15 Parapet -

Parapet walls and hand rails provided on the edge of roof terrace, balcony etc shall not be more than 1.20 metres in height.

## 29.16 Cabin -

The size of cabin shall not be less than 3.0 sq.metres. The clear passages with in the divided space of any floor shall not be less than 0.75 metres and the distance from the farthest space in a cabin to any exit shall not be more than 18.5 metres. In case the sub-divided cabin does not derive direct lightning and ventilation from any open spaces or mechanical means the maximum height of the cabin shall be 2.2 metres.

## 29.17 Wells -

Wells, intended to supply water for human consumption for domestic purposes shall comply with the following requirements.

# 29.17.1 **Locations** – The well shall be –

- a. Not less than 15 metres away from any ash pit, refuse pit, earth closet or privy and shall be located on a site upwards from the earth closet on privy.
- Not less than 18 metres away from any cess pit, soak way or borehole latrine and shall be located on a site upwards from the earth closet or privy
- c. So situated that contamination by the movement of sub-soil or other water is unlikely.
- d. Shall be of a minimum internal diameter of not less than 1.0 metres.
- e. Not under a tree or otherwise it should have a canopy over it so that leaves and twigs may not fall into the well and rot; and

# 29.17.2 **Requirements** –

The well other than borewell or a tube well shall-

- a. have a minimum internal diameter of not less than 1.0 mtr.
- b. be constructed to a height not less than 1.0 mtr. above the surrounding ground level to form a parapet or kerb to prevent surface water from flowing into a well and shall be surrounded with a paving constructed of impervious material which shall extend for a distance of not less than 1.8 metres direction from the parapet from the kerb forming the well head and the upper surface of such paving shall be sloped away from the well.
- c. be of sound and permanent construction throughout.
- f. Temporary or exposed wells shall only be permitted in fields or garden for purpose of irrigation and
- g. the interior surface of the lining of walls of the well shall be rendered impervious for a depth of nor less than 1.8 metres measured from the level of the ground immediately adjoining the wall head.
- 29.18 **Septic Tanks –** Where a septic is used for sewage disposal, the location, design and construction of the septic tank shall conform to requirement given below namely -
  - 29.18.1 Location of septic tanks and surface absorption system

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

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# 29.18.2 **Requirements** –

- a. Dimension of Septic Tanks Septic tanks shall have minimum width of 75 centimeters, minimum depth of one meter below the water level and minimum liquid capacity of one cubic meter, length of tanks shall be 2 to 4 times the width.
- Septic tanks may be constructed of brickwork, stone masonry concrete or other suitable materials as approved by the Chief Executive Officer/ Health Officer.
- c. Minimum nominal diameter of pipe shall be 100 millimeter. Further, at junction of pipes in manholes direction of flow from a branch connection should not, make an angle exceeding 45 degrees with the direction of flow in the main pipe.
- d. The gradients of land drains, under drainage as well as the bottom of dispersion trenches and soak ways should be between 1:300 and 1:400.
- e. Under no circumstances should effluent from a septic tank be allowed into an open channel drain or body of water without adequate treatment.
- f. Every septic tank shall be provided with ventilating pipe of at least 50-millimeter diameter. The top of the pipe shall be provided with a suitable cage of mosquito proof wire mesh.
- g. The ventilating pipe shall extend to a height which would cause no smell nuisance to any building in the area. Generally, the ventilating pipe may extend to a height about 2 metres when the septic tank is at least 15 metres away from the nearest building and to a height of 2 metres above the top of the building when it is located closer than 15 metres.
- h. When the disposal of septic tank effluent is into seepage pit, the seepage pit may be of any suitable shape with the least cross-sectional dimension of 90 centimeters and not less than 100 centimeters in depth below the invert level of the inlet pipe. The pit may be lined with stone, brick or concrete blocks with dry open joints which should be baked with at least 73.5 centimeter of clean course aggregate. The lining

above the inlet level should be finished with mortar. In the case of pits of large dimension, the top portion may be narrowed to reduce the size of the RCC cover slabs. Where no lining is used, specially near trees, the entire pit should be filled with loose bricks bats. A masonry ring may be constructed at the top of the pit to prevent damage by flooding of the pit by surface run off. The inlet pipe may be taken down to a depth of 90 centimeters from the top as an anti-mosquito measures; and

i. When the disposal of septic tank effluent is to dispersion trench, the dispersion trench shall be 50 to 100 centimeters deep and 30 to 100 centimeters wide excavated to a slight gradient and shall be provided with 15 to 25 centimeters of washed gravel or crushed stones. Open jointed pipes placed inside the trench shall be made of unglazed earthenware clay or concrete and shall have minimum internal diameter of 75 to 100 millimeter. No dispersion trench should be be longer than 30 metres and trenches should not be placed closer than 1.8 meters.

# 29.19 **Boundary Wall-** The requirement of the boundary wall shall be as follows, namely: -

- a. Except with the special permission of the Chief Executive Officer the maximum height of the boundary wall shall be 1.5 metres above the centre line of the front street. The total height of the Boundary wall shall not exceed 2.4 metres and shall be of a design to be approved by the Chief Executive Officer and may have a grill / railing of height of not more than 0.90 metres.
- b. In case of corner plot the height of the boundary wall shall be restricted to 0.75 metres for a length of 10 metres on the front and side of the intersection and balance height of 0.75 metres if required in accordance with clause (a), may be made up of open type construction (through railings) and of design to be approved by the Chief Executive Officer.
- c. However, the provision of (a) and (b) are not applicable to boundary walls of jails. In industrial buildings, electric sub-stations, transformer stations, institutional buildings like workshops, factories and educational buildings like schools, colleges including the hotels and other uses of public utility undertakings, height upto 2.4 meters may be permitted by the Chief Executive Officer.
- d. The compound gate should open entirely inside the property and shall not open on any access/ pathway/road/street.

# 29.20 Solid Waste Management

All building applications pertaining to areas other than the civil areas should provide for Solid Waste Management by way of prefereably composting process. The location of the composting pit should be preferably located at the periphery of the plot and shown in the building plan.

## 29.21 Office Cum Letter Box Room -

In the case of multistoreyed multi-family dwelling apartments constructed by existing and proposed co-operative housing societies or apartments owners association, limited companies and proposed societies, an office cum letterbox room of dimension 2 metres X 3 metres shall be provided on the ground floor or under stilts .

# 29.22 Hydraulic Parking / Mechanical Parking -

The Hydraulic parking is permitted in a building subject to the following –

- a. It shall be applicable in case of plots exceeding 750 sq.mtr.
- b. The approach to the building shall have a minimum width of 6.0 mtrs.
- c. The parking well shall not be counted in the FAR of the building.
- d. The detailed designs for the parking well should be submitted alongwith the building plan duly certified along with structural drawings from a structural designer.

# 30. PROVISION OF LIFTS AND ESCALATORS

30.1 The planning design including the number of lifts, capacity of lifts depending on occupancy of building population on each floor based on occupant load, height of building shall be in accordance with Section-5 – Installation of lifts and Escalator of National Building Code of India.

Provided however, that the lift shall be provided in public hospital buildings exceeding 8m in height.

30.2 **Maintenance of lift in working condition -** The lift shall be maintained in working condition.

## 31. EXIT REQUIREMENT -

- 31.1 **General** The following general requirements shall apply to exits:-
  - every building meant for human occupancy shall be provided with exit sufficient to permit safe escape of occupants in case of fire or other emergency.

- b. in every building exits shall comply with the minimum requirements of this part except those not accessible for general public use.
- c. all exits shall be free of obstructions.
- d. no building shall be altered so as to reduce the number, width or protection of exits to less than that required.
- e. exits shall be clearly visible and the routes to reach the exists shall be clearly marked and sign posted to guide the population to floor concerned.
- f. all exit ways shall be properly illuminated.
- g. fire fighting equipments where provided along exists shall be suitably located and clearly marked but must not obstruct the exit way and yet there should be clear indication about its location from either side of the exit way.
- h. alarm devices shall be installed for buildings above 15 m in height to ensure prompt evacuation of the population concerned through the exists.
- i. all exists shall provide continuous means of egress to the exterior of a building or to an exterior open space leading to a street, and
- j. exists shall be so arranged that they may be reached without having to pass through another occupied unit, except in the case of residential buildings.

# 31.2 **Type of Exits**:

- a. Exits shall be either of horizontal or vertical type, As exit may be doorway, corridor, passageway, to an internal staircase of external staircase ramps or a verandah and / or Terrace which have access to the street or to them roof of a; building. An exit may also include a horizontal exits leading to an adjoining building at the same level, and
- b. Lifts and escalators shall not be considered as exits.

**Number and size of Exits** – Adequate number and size of various exits shall be provided, based on the population in each room area and floor based on the occupant load capacity of exits, travel distance and height of buildings.

Arrangement of Exit – Exits shall be so located so that the total travel distance on the floor shall not exceed 22.5 m residential, education, institutional and hazardous occupancies and 30 m for assembly, business mercantile, industrial and storage occupancies, Whenever more than one exit is required for a floor of a building, exits shall be placed as remote from each other as possible. All the exits shall be accessible from the entire floor area at all floor levels.

**Occupant Load** – The population in rooms, area of floors shall be calculated based on the occupant load given in Table No. 4.

**Capacity of Exits** – The capacity of exits (doors and stairways) indicating the number of persons that could be safely evacuated through a unit exit width of 50 cm.

For all building more than 15 metres in height, there shall be a minimum of two staircases, They shall be of enclosed type stairways. At least one of them shall be on the external wall of building and shall open directly to exterior, interior open space or to any open place of safety.

Stair case shall be of the following minimum width -

a. Residential building (dwellings)

1.0m

**Note**: for row housing with 2 storeys the minimum width shall be 0.75m.

| b. | Residential hotel buildings                          | 1.5 m |
|----|--|-------|
| c. | Assembly buildings like auditoria theatres & Cinemas | 1.5 m |
| d. | Educational buildings                                | 1.5 m |
|    | Not exceeding 24 m                                   |       |
| e. | Institutional Building like hospitals                |       |
|    | Upto 10 Beds   | 1.5 m |
|    | More than 10 beds                                    | 2.0 m |
| f. | All other buildings                                  | 1.5 m |

31.3 **Other Requirements of Individual Exits** - The detailed requirements of individual exits are given below.

## 31.3.1 **Doorways** -

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

(No exit doorway shall be less than 100 cms in width; doorways shall be not less than 200 centimeters in height. Doorways for

bathrooms, water closet, stores etc. shall be not less than 75 cms wide.

- b. Exit doorway shall open outwards, that is away from the room but shall not obstruct the travel along any exit. No door, when opened, shall reduce the required width of stairway or loading to less than 90 centimeters overhead or sliding doors shall not be installed.
- c. Exit door shall not open immediately upon a fight of stairs. A landing equal to at least the width of the door shall be provided in the stairway at each doorway; level of landing shall be the same as that of the floor which is serves.
- d. Exit doorways shall be openable from the side which they serve without the use of a key.

# 31.3.2 Revolving Doors -

- a. Revolving doors may be used as required exit only in residential, business and mercantile occupancies, but shall not constitute more than half the total required door width.
- b. When revolving doors are considered as required exitway, the following assumption shall be made.
  - i. Each revolving door shall be credited one half a unit exit width; and
  - ii. Revolving doors shall not be located at the foot of stairway. Any stairway served by a revolving door shall discharge through a lobby or foyer.

# 31.3.3 **Stairways**

- a. Interior stair shall be constructed of non-combustible material throughout.
- b. Interior stair shall be constructed as a self contained unit with at least one side adjacent to an external wall and shall be completely enclosed.
- c. A staircase shall not be arranged round a lift shaft unless the latter is entirely enclosed by a material of fire resistance rating as that for type of construction itself. For buildings more than 15 mtrs in height the staircase location shall be to the satisfaction of the Chief Executive Officer.
- d. Hollow combustible construction shall not be permitted
- e. The minimum width of an internal staircase shall be 100 cms.
- f. The minimum width of tread without nosing shall be 25 cms for an internal staircase for residential buildings. In the case of other buildings the minimum tread shall be 30 cms. The tread shall be constructed and maintained in a manner to prevent slipping.
- g. The maximum height of riser shall be 19 cms in the case of residential building and 15 cms in the case of other buildings. They shall be limited to 12 per flight. For low income housing scheme in narrow plots the risers may be provided in one flight
- h. Handrails shall be provided with a minimum height of 90 cms from the centre of the tread. In the case of public offices, assembly halls,

hospitals etc an additional low rail shall be provided at a height of 75 cms.

- i. The minimum head room in a passage under the landing of a staircase and under the staircase shall be 2.2 mtrs
- j. No living space, store or other fire risk shall open directly into the staircase or staircases
- k. External exist door of staircase enclosure at ground level shall open directly to the open space or shall be such as can be reached without passing through any door another than a door provided to form a draught lobby.
- In case of single staircase it shall terminate at the ground floor level and the access to the basement shall be by a separate staircase. Wherever the building is served by more than one staircase one of the staircases may lead to basement level provided the same is separated at ground level by either a ventilated lobby or a out off screen wall without opening, having a fire resistance of not less than 2 hours with discharge point at two different ends of through enclosures. It shall also be cut off from the basement area at various basement levels by a protected and ventilated lobby/lobbies. The staircase shall be lighted and ventilated and the minimum size of opening on walls abutting to open spaces shall be 0.3 sqm per landing.
- 31.3.4 **Fire escape or external stairs –** For buildings above 15 m in height fire escape stirs shall be provided subject to the following conditions:
  - a. Fire escape shall not be taken into account in calculating the evacuation time of a building.
  - b. All fire escapes shall be directly connected to the ground.
  - c. Entrance to fire escape shall be separate and remote from the internal staircase.
  - d. The route to fire escape shall be free of obstructions at all times, except a doorway leading to the fire escape which shall have the required fire resistance.
  - e. Fire escape shall be constructed of non-combustible materials.

- f. Fire escapes stairs shall have straight flight not less than 75 cm wide with 15 cm treads and risers not more than 19 cm. The number of rises shall be limited to 1 per flight.
- g. Handrails shall be a height not less than 90 cm.
- 31.3.5 **Spiral Stairs (fire escape)-** The use of spiral staircase shall be limited to low occupant load and to a building of height 9 m unless they are connected to platform such as balconies and terrace to allow escapees to pause.

A spiral fire escape shall be not less than 150 cm in diameter and shall be designed to give adequate headroom.

## 31.3.6 Ramps -

- a. Ramps with a slope of not more than 1 to 10 may be substituted for and shall comply with all the applicable requirements of required stairways as to enclosure, capacity and limiting dimensions. Ramps shall be surfaced with approved non-slipping materials. Provided that in the case of public offices, hospitals, assembly halls etc the slope of the ramp shall not more than 1:12.
- b. The minimum width of the ramps in hospitals shall be 2.25 metres.
- c. Hand rails shall be provided on both sides of the ramp.
- d. Ramps shall lead directly to outside open space at ground level or court yard or safe place.

#### 31.3.7 Corridors-

- a. The minimum width of a corridor shall not be less than 90 centimeters in the case of 2 storey row housing residential building and actual width shall be calculated based on the provisions of Byelaw No.20.2
- b. In case of more than one main staircase of the building interconnected by a corridor or other enclosed space there shall be at least one smoke stop door across the corridor or enclosed space between the doors in the enclosing walls of any two staircases.
- 31.3.8 **Refuse Area** For all buildings exceeding 15 m in height excepting multi-family dwellings, one refuge area shall be provided.

Refuge area shall be provided on the external walls as cantilever projection or in any other manner (which will not be covered in F.A.R) with a minimum area of 15 sq.m

### 31.3.9 **Lifts**

- a. All the floors shall be accessible for 24 hours by the lifts. The lifts provided in the building shall not be considered as a means of escape in the case of emergency.
- b. Grounding switch at ground floor level tenable the fire service to ground the lifts cars in an emergency shall also be provided.
- c. The lift machine room shall be separate and no other machinery shall be installed therein.
- d. The lift should have child lock arrangement and should stop / land on a floor when power gets disrupted. It should also have a fire alarm.

### 32. SAFETY NORMS -

Building shall be planned, designed and constructed to ensure fire and life safety and this shall be done in accordance with Part IV of National Building Code of India unless otherwise specified in these byelaws.

### 33. SPECIAL REQUIREMENTS OF OCCUPANCIES -

# 33.1 Special Requirements of Educational Buildings -

- 33.1.1 No classroom shall admeasure less than 38 sq.m with a minimum dimension of 5.5 m.
- 33.1.2 The height of any classroom shall not be less than 3.6 mtrs.
- 33.1.3 Exit requirements This shall conform to Byelaw No. 31.
- 33.1.4 Requirements of Water Supply, Drainage and Sanitation This shall conform to Table No. 6 and 10.
- 33.1.5 Parking Spaces- This shall conform to Table No.3.
- 33.1.6 The provision for playground and assembly shall be made compulsorily as per the regulations stipulated by the Competent Authority. The permissible FAR shall be calculated after excluding the area required to be utilized for playground / Assembly from the total area calculations.

# 33.2 Special requirements of Institutional Buildings (Hospital, Maternity home and health centre, Sanatoria)

- 33.2.1 No special room in the hospital building shall admeasure less than 9.5 sq.m in area with no side less than 3 m
- 33.2.2 Area of the general wards shall not admeasure less than 40 sq.m with no side less than 5.5m.
- 33.2.3 Exit Requirements This shall conform to Byelaw No. 31.
- 33.2.4 Requirements of water supply drainage and Sanitation.

These shall conform to Table No. 6 &11.

- 33.2.5 Parking Spaces- This shall conform to Table No.3.
- 33.3 Special requirements of Cinema Theatres (Assembly Halls)
- 33.3.1 They shall confirm to the provisions of Maharashtra Cinema (Regulations) Rules, 1966, as amended from time to time, or any similar Rules prevalent in the State in which the Cantonment is situated.

- 33.3.2 Exit Requirements This shall conform to Byelaw No. 31.
- 33.3.3 Requirements of water supply, drainage and Sanitation.

These shall conform to Table No. 6 & 15.

- 33.3.4 Parking Spaces- This shall conform to Table No. 3.
- 33.3.5 Multistoreyed theatres may be allowed provided each theatres so constructed conforms to the provisions of these Byelaws separately.

However, the total number shall be restricted to two in one building.

For such theatres an adequate sizes of staircases, balconies and foyers shall be provided for the comfort of the audience.

- 33.3.6 The site must be got previously approved by the District Magistrate and Commissioner of Police.
- 33.3.7 Booking office must be so located that the patrons are not required to stand in a queue for booking tickets on the public roads.
- 33.3.8 Acoustics The acoustics designed with calculations and details and the architectural designs shall be submitted to the Chief Executive Officer.
- 33.3.9 Architectural details drawn to the scale of 1:15 in addition to the usual plan shall be submitted to the Chief Executive Officer and will be subject to approval.
- 33.3.10 If any portion of the said building is intended to be used as a domestic building such portion shall comply with all the requirements of the domestic building.
- 33.3.11 The building application for construction shall be entertained only after the applicant has obtained necessary permission from the appropriate authorities as per law for the time being in force.

## 33.4 Special Requirements of Mercantile Buildings -

33.4.1 Minimum area of shop shall be 10 sq.m with a minimum width of 3 mtrs

# 33.5 Special Requirements of Factories/ Industrial Buildings -

- 33.5.1 In addition to provisions of these byelaws, regulations prescribed under Factory Act shall be applicable.
- 33.5.2 In the case of Industrial Buildings with different operations / process, the different (gaseous, solid, liquid) effluents shall be sole subject to the approval of Maharashtra Water Prevention of Pollution Board and Chief Inspector of Steam Boilers and Smoke Nuisance, before letting it out on the air, ground or water course, or any similar Rules prevalent in the State in which the Cantonment is situated.
- 33.5.3 Exit Requirements This shall conform to Byelaw No. 31.
- 33.5.4 Requirements of water supply drainage and Sanitation.

These shall conform to Table No. 6 & 17.

- 33.5.5 Parking Loading and unloading Spaces These shall conform to Table No. 3.
- 33.5.6 There shall be provided a minimum open air space of 3.05 metres wide for which of the face of a factory building or of a building of the warehouse less on one more side in addition to the front and such open space shall form an inseparable part of the site of such building and may also serve as a means of access for such building.
- 33.5.7 If any bay or room in such building does not abut on the front open space or is not adequate lighted and ventilated from the roof, such bay or room shall abut on an air space (of minimum 3.05 metres) such open air space forming an inseparable part of site of such building.

- 33.5.8 If more than one of such building belonging to the same owner abuts on a common open space within the owner's premises the width of such common open space shall be the width necessary for the tallest of such buildings abutting thereon in accordance with these byelaws.
- 33.5.9 No advantage of any neighboring open space not belonging to the same owner shall be granted for determining the necessary open space.
- 33.5.10 Every room in such building shall be lighted and ventilated by sufficient number of windows abutting on open air space as specified in (1) and (2) above, to the satisfaction of the Chief Executive Officer.

## 33.6. Special requirements of Religious Buildings -

- 33.6.1 No mosque, temple, church, gurudwara or other sacred or religious building shall be erected-
- a. Unless it is situated at a distance of not less than 91.45 metres from any other sacred or religious building and unless written no objection of the District Magistrate, Amritsar, and Commissioner of Police, Amritsar has been obtained regarding suitability of the proposed erection; and
- b. Unless the frontage is atleast 460 centimeters from the centre of the street on which it abuts. Provided that this restriction will not apply to existing sacred or religious buildings.
- c. The provision for open space for assembly shall be made compulsorily as per the regulations stipulated by the Competent Authority.

# 33.7 Special requirements of Godowns meant for storing materials such as food grains, oils, clothings etc. –

- 33.7.1 Such buildings should have a plinth height of minimum 60 centimeters. The floor shall be well consolidated with minimum 10 centimeters thick rubble soling or hard core of 4 centimeters thick metal, below Indian Patent Stone flooring or minimum 6 centimeters thick Shahabad flooring. The roof height of the Godown should not be less than 4.0 metres above the floor level. The provisions for ventilation should not be less than 1/20<sup>th</sup> of the floor area.
- 33.7.2 Godown walls shall not be less than 35 centimeters thick and plastered at least from inside in cement mortar.

- i. In every such building of the ware-house class there shall be provided one water closet for every 50 males or part thereof and one water closet of every 50 females or part thereof, thereafter water-closet shall be provided at the rate of one closet for every 70 persons.
- ii. In every such building of the warehouse class there shall be provided one urinal for every 100 persons of each sex or part thereof.
- iii. For the purpose of determining the number of water-closets and urinals 27.87 square metres of the gross floor space of such buildings shall be deemed to be occupied by one person.
- iv. Such water–closets and urinals shall be in an accessible location and shall be provided with signs plainly indicating the purpose and sex for which they are meant.
- v. In each godown adequate number of Fire Extinguishers, buckets with sand/water etc. will be provided as prescribed by the Chief Executive Officer

## 33.8 Special requirements of Stables -

- 33.8.1 Every person who erects a stable or cow-house shall provide adequate means for the drainage and the ventilation which shall be minimum 1/10<sup>th</sup> of the area of the floor.
- 33.8.2 The floor of such buildings is to be composed of cement concrete or other suitable impervious material.
- 33.8.3 No living or sleeping room intended for human habitation shall be constructed over such stable and no such stable shall be erected in a place where in the opinion of the Board or Chief Executive Officer as the case may be, it may become nuisance or annoyance to the occupants of any other buildings.

## 33.9 Special requirements of Flour Mill/Small Work Shop -

33.9.1 The Board or the Chief Executive Officer as the case may be shall consider a request for the installation of a prime mover for running a flour mill/workshop/manufactory and shall allow the installation of such prime mover of a reasonable Horse Power.

- 33.9.2 The false ceiling provided shall be at a minimum height of 2.74 metres above the floor level and an exhaust fan be provided at the bottom level of such false ceiling of adequate capacity so as to have the air turn over of 3 times the cubic capacity per hour.
- 33.9.3 All machines shall be adequately guarded so that no exposed moving part shall be a source of danger to a worker.
- 33.9.4 The area of the room shall not be less than 18.58 sq. meters with no dimension less than 3.05 meters.
- 33.9.5 Key plans in triplicate showing the proposed arrangements should be submitted to the scale of 1:21 meters for the sanction of the Board, or the Chief Executive Officer.
- 33.9.6 The building should be strong enough to with stand the shocks due to vibrations.
- 33.9.7 Adequate foundation for machines shall be provided.
- 33.10 Special requirements for petrol filling stations.
- 33.10.1 The location of the petrol filling stations and its layout shall be approved by the Board in consultation with the Commissioner of the Division / Competent Authority depending upon width of roads and traffic generated, location with respect of points of intersections and nearness to the occupancies of educational, assembly, storage and hazardous uses
- 33.11 Special requirements for facilities to be provided in public building for disabled persons.
- 33.11.1 **Scope**: These bye-laws are applicable to all building, recreation areas & facilities used by public. It does not apply to private domestic residences.
- 33.11.2 **Site Planning**: Level of the roads, access paths & parking areas shall be described in the plan along with specification of materials. Every building should have at least one access to main entrance / exit to the disabled which shall be indicated by proper signage. This entrance shall be approached through a ramp together with stepped entry. The ramp should have a landing after every 9 metre run and in front of the doorway. Minimum size of landing shall be 1000 x 2000 mm.
- 33.11.3 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 step. 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. Finishes shall have a non-slip surface with texture traversable by a wheel chair. Curbs wherever provided should blend to common level.

- 33.11.4 **Parking**: For parking of vehicles of disabled people the following provisions shall be made:
- a. Surface parking for two Equivalent Car Space (ECS) shall be provided near entrance for the physically handicapped persons with maximum travel distance of 30 metres from building entrance.
- b. The width of parking bay shall be minimum 3.6 metre.
- 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.
- 33.11.5 **Approach to Plinth Level**: Ramp shall be provided with non-slip material to enter the building minimum clear width of ramp shall be 1800 mm with maximum gradient 1:12, between top and bottom of the ramp. Length of ramp shall not exceed 9.00 metres having 800 mm high handrail on both sides extending 300 mm beyond the ramp. Minimum gap from the adjacent wall to the handrail shall be 50 mm. Minimum clear opening for the entrance door shall be 1000 mm. Threshold shall not be raised more than 12 mm.

For stepped approach, size of the tread shall not be less than 300 mm and maximum riser shall be 150 mm. Provision of 800 mm high handrails on both sides of the stepped approach similar to the ramped approach shall be made.

- 33.11.6 Corridor connecting the entrance /exit for the disabled: The corridor connecting the entrance / exit for handicapped leading directly outdoors to a place where information concerning the overall use of the specified building can be provided to visually impaired person either by a person or by signs, shall be provided as follows:
- a. Guiding floor materials shall be provided or devices that emit sound to guide visually impaired persons.
- **b.** The minimum width shall be 1500 mm.
- **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.

- 33.11.7 **Stairways**: Stairs should not be the only means of moving between floor. They should be supplemented by lifts or ramps.
- a. Straight flights of steps are preferred by ambulant disabled people. Treads should be approximately 300 mm deep and risers not higher than 150 mm. Steps should of a consistent height and depth throughout the stair. Projecting nosing's and open stairs should be avoided to minimize the risk of stumbling.
- b. Handrails should be provided to both sides of any stairways. They should be continuous and extend not less than 300 mm beyond the top and bottom step (otherwise it is difficult for the disabled to use the rail at the first and last step)
- c. For people with impaired vision, there should be a colour contrast between landing / landings, and top and bottom steps of a flight of steps, or the front edge of each step should have contrasting colour.

# 33.11.8 Door and doorways:

- a. Door width: To enable wheelchair users to pass through door, the minimum clear width should be operable by a single effort. In certain cases the clear width should be 900 mm to 1000 mm, for example: If the wheelchair has to turn in the doorway, where there is a door closer or at entrance doors to public building ad in other situations where there is considerable traffic.
- b. Side-hung doors: To facilitate wheelchair man oeuvre door should be hung with the hinges in room corners. Door opening out into corridors or circulation spaces should be avoided as far as possible.
- c. Wheelchair maneuvering spaces should be provided. A corridor should have a width of at least 200 mm to allow a 90 degree turn to be made through a door. In narrow spaces sliding door may be preferable.
- d. Thresholds: Raised thresholds should be avoided, but where this is not possible, their height should not exceed 25 mm. Rubber thresholds are advantageous for wheelchair users.

Care should be taken in the selection, placement and setting of door closers so that they do not prevent the use of doors by the physically disabled. Time-delay door closers are recommended.

- e. Self-closing doors: Wheelchair users and other with impaired mobility have difficulty in using self-closing doors. The force required to open them should be reduced as far as possible. Public buildings should preferably have sliding automatic doors.
- f. Door Identification: To held people with impaired vision to see doors, the door and frame should be in a colour which contrasts with the adjoining wall. Glass or glazed doors should be marked with a coloured band or frame, a little below eye-level.
- g. Handles: Door handles and locks should be easy to manipulate. To facilitate the closing of a door by wheelchair users( for example, a water closet compartment), the door should have a horizontal handle approximately 800 mm from the floor. Self-closing doors should be equipped with an easy gripped vertical pull-handle with a length of at least 300 mm, and with the lower end approximately 800 mm above floor. For many people and specially those with impaired vision, it is helpful to make clear whether doors are to be pulled or pushed.

- 33.11.9 **Windows**: Windows should be designed to avoid the glare which is a particular problem for people with impaired vision. Large glass areas close to circulation spaces should be marked a little below eye-level with a coloured band or frame. To enable wheelchair users to see through a window comfortably, the sill should be not higher than 800 mm from the floor. Windows should be easy to open and close. Their controls should be placed in the zone 900 to 1200 mm from the floor.
- 33.11.10 **Lifts**: Whenever lift is required as per Bye-laws, provision of at least one lift shall be made for the wheel chair user with the following car dimensions of lift recommended for passenger lift for 10 persons capacity by Bureau of the Indian Standard.

Clear internal depth 1100 mm Clear internal width 2000 mm Entrance door width 910 mm

- (a) A handrail not less than 600 mm long at 900 mm 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 or more.
- (c) The Braille signage will be posted outside the lifts.
- (d) Operational details of the lifts shall conform to the National Building Code (NBC) and will be the responsibility of designer as well as manufacturer.
- 33.11.11 **Sanitary Facilities**: It is essential that sanitary facilities, in accordance with the nature and use of a specific building or facility, be made accessible to, and usable by, the physically challenged.
  - 1. Sanitary facilities shall have space to allow traffic of individuals in wheelchairs.
  - 2. Sanitary facilities shall have at least one water-closet cubical for the ambulant disabled, that :
  - a) Is 900 mm wide
  - b) Is a least 1500 mm, preferably 1600 mm deep
  - c) Has a door (where doors are used), that is, 800 mm wide and swings out;
  - d) Has handrails on each side, 780 mm high and parallel to the floor, 40 mm clearance between rail and wall, and fastened securely at ends and centre; and
  - e) Has a water-closet with the seat 500 mm from the floor.
    - NOTE The designing and mounting of the water-closet is of considerable importance. A wall-mounted water closet with a narrow understructure that recedes sharply is most desirable. If a floor

mounted water-closet must be used, it should not have a front that is wide and perpendicular to the floor at the front of the seat. The bowl should be shallow at the front of the seat. The bowl should be shallow at the front of the seat and turn backwards more than downwards to allow the individual in a wheelchair to get close to the water-closet with the seat of the wheelchair.

- Sanitary facilities shall have wash basins with narrow aprons, which when mounted at standard height are usable by individuals in wheelchairs; or they shall have wash basins mounted higher, when particular designs demand, so that they are usable by individual do not find it inconvenient.
- 4. Some mirrors and shelves shall be provided above the washbasins at a height as low as possible and not higher than 1 m above the floor, measured from the top of the shelf and the bottom of the mirror.
- 5. Sanitary facilities for men shall have wall-mounted urinals with the opening of the basin 460 mm from the floor, or shall have floor mounted urinals that are on level with the main floor of the toilet room.
- 6. Toilet rooms shall have an appropriate number of towel racks, towel dispensers, and other dispensers and disposal units mounted not higher than 910 mm from the floor.
- 33.11.12 **Drinking Fountains**: An appropriate number of drinking fountains or other water-dispensing means shall be accessible to and usable by the physically disabled.
  - 1. Drinking water fountains or water coolers shall have up font spouts and control.
  - 2. Drinking water fountains or water coolers shall be hand-operated or hand and foot-operated.
  - 2.1 Conventional floor mounted water coolers may be convenient to individuals in wheelchairs if a small fountain is mounted on the side of the cooler 800 mm above the floor.
  - 2.2 Fully recessed drinking water fountains are not recommended.
  - 2.3 Drinking water fountain should not be set into an alcove unless the alcove is wider than a wheelchair.
- 33.11.13 **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 fire fighters. It is useful to have the provisions of a refuge area, usually at fire protected stair landing on each floor that can safely hold one or two wheelchairs.

- Hand doorways with clear opening width of 900 m and
- Have an alarm switch installed between 900 mm and 1200 mm from the floor level

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#### CHAPTER - V

### STRUCTURAL SAFETY AND SERVICES

#### 34. STRUCTURAL DESIGN -

34.1 The structural design of foundations, elements made of masonry, timber, plain concrete, reinforced concrete, pre-stressed concrete and structural steel shall be carried out in accordance with part VI. Structural design, Section 1- Loads, Section 2- Foundation. Concrete, Section 3- Wood, Section 4-Masonry, Section 5- Concrete, Section 6- Steel of National Building Code of India.

### 35. QUALITY OF MATERIALS AND WORKMANSHIP -

- 35.1 All materials and workmanship shall be of good quality confirming generally to accepted standards of Military Engineering Services Government of India and Indian Standard Specifications and Codes as included in part V Building Materials and Part VII Constructional Practices and Safety of National Building Code of India.
- 35.2 All pits dug in the course of construction and repairs of buildings shall be deep and connected with each other in the formation of a drain directed towards the lowest level and properly steps of discharge into a drain and no person shall create any isolated borrow pit which is likely to caused accumulation of water which may breed mosquitoes

# 36. ALTERNATIVE MATERIALS METHODS OF DESIGN AND CONSTRCUTION AND TESTS -

- 36.1 The provisions of the rules are not intended to prevent the use of any material or method of design or construction not specifically prescribed by the rules provided any such alternative has been approved.
- 36.2 The provisions of these rules are also not intended to prevent the adoption for architectural planning and layout conceived as an integrated development scheme.

- 36.3 The Board/The Chief Executive Officer may approve any such alternative provided it is found that the proposed alternative is satisfactory and confirms to the provisions of relevant parts regarding material, design, construction and that material, method or work offered is for the purpose intended, at least equivalent to the prescribed in the rules in quality, strength, compatibility, effectiveness, fire resistance, durability and safety.
- 36.4 Tests Whenever there is insufficient evidence of compliance with the provisions of the rules of evidence that any material or method of design or construction does not confirm to the requirements of the rules or in order to substantiate claims for alternative materials, design or methods of construction the Board/The Chief Executive Officer may require tests sufficiently in advance as proof of compliance. These test shall be made by an approved agency at the expense of the owner.
  - 36.4.1 Tests Method Test methods shall be as specified by the rules for the materials or design or construction in question. If there are no appropriate tests methods specified in the rules, the Board/the Chief Executive Officer shall determine the test procedure. For methods of test for building materials, reference may be made to the relevant Indian Standards as given in the National Building Code of India, published by the Indian Standard Institution. The latest version of the National Building Code of India shall be taken into account at the time of enforcement of these rules
  - 36.4.2 Copies of the results of the all such tests shall be retained by the Cantonment Board for a period not less than 2 years after the acceptance of alternative material.

### 37. PLUMBING SERVICES -

37.1 The planning, design, construction and installation of water supply, drainage and sanitation and gas supply systems shall be in accordance with the provisions of Water Supply and Drainage Rules of Part IX Plumbing Services –Section I Water Supply. Section 2 Drainage and Sanitation and Section 3- Gas supply of National Building Code of India.

# 37.2 Requirement of water supply in buildings-

37.2.1 The applicant is required to submit details of the source of water from which he proposes to provide the supply to the proposed building, failing which the building plan will not be considered. If supply of water is not available at the subject site where the erection / re-erection has been proposed, from any source of the Govt./ Municipality / Cantt Board, the applicant is required to make his own arrangements to ensure supply to the buildings and submit an undertaking to that effect alongwith the building application without which plans will not be sanctioned.

37.2.2. The total requirement of water supply shall be calculated based on the populations as given below –

Occupancy
Residential Buildings
5 persons/tenement
No. of persons based on
Occupants load and area
of floors given in Table No.4

37.2.3 The requirements of water supply for various occupancies shall be as given in Table No. 6.

**Note**: If availability of water in Cantonment is not as per the norms mentioned in Table No. 6, the Cantonment Board shall not refuse the sanction of building plan and instead review the requirement as per existing water supply facilities provided by the Board. The values mentioned in Table 6 are ideal and if availability of water does not conform to the same, the Board cannot refuse the sanction of building application suo-moto and rather should review the minimum requirements as per water supply available in the Cantonment. However, the applicant is required to take water connection from the Competent Authority before Completion Certificate is issued and undertaking in this regard is required to be submitted at the time of building application.

# 37.3 Requirements of Sanitary fittings -

The sanitary fittings and installations for different occupancies shall be as given in Table No. 9 to 17.

#### 38. LIGHTNING PROTECTION OF BUILDINGS -

The lightning protection for building shall be provided based on the provisions of part III of the National Building Code of India.

#### 39. CLEARING OF SITES-

As soon as any building is completed all rubbish refuse or debris of any description shall be removed by the owner from the site or sites on which building operations have been carried out or from an adjoining land which may have been used for deposition of materials/ debris.

#### 40. BUILDINGS DAMAGED DUE TO ACT OF GOD :-

- 40.1 Not withstanding anything contained in these byelaws a person shall be eligible to re-erect, renovate or repair his building which has been damaged or fallen down due to earthquake, flood, fire storm or any act of God subject to the fulfillment of the following conditions viz.
  - a. he shall give an intimation of such an event to the Chief Executive Officer within a period of seven days from the date of its occurrence, which the CEO shall get verified either personally or by deputing his representative(s) to site and obtain a report thereof.
  - b. he shall give a notice for re-erection, renovation or alteration of the building along with plan at least seven days before commencing the work.
- 40.2 The Chief Executive Officer shall on receipt of the intimation under clause (a) of sub-section 40.1 shall cause the site to be inspected either by himself or by an officer authorized by him in his behalf in order to ascertain the veracity of the notice. If the contents of the notice is not found to be correct, the Chief Executive Officer shall, in writing, forthwith direct the concerned person not to commence the work.
- 40.3 The reconstruction /re-erection shall be as under :-
- (i) The total floor space of the building after re-erection, renovation or alteration shall not exceed the total authorized floor space of the building so damaged or fallen down and it shall be re-erected, renovated or altered in conformity with the original sanctioned plan.

OR

- (ii) The re-erection, renovation or repair of the building shall be in accordance with the provisions of building byelaws made under this Act;
- 40.3.1 Where sanctioned plan of such building is not available in the records of the office of Cantonment Board or Defence Estates Officer, the applicant shall

produce copy of sanctioned plan of the building or Survey of India plan or any other document which shows that the building was in existence and it was not declared unauthorized by the Cantonment Board or Defence Estates Officer by way of issuance of any notice or order to this effect under the law in force.

- 40.4 After completion of the re-erection, renovation or alteration of the building either in terms of 40.3 (i) or 40.3 (ii), the applicant shall give an intimation to the Chief Executive Officer within seven days.
- 40.4.1 The Chief Executive Officer shall, on receipt of the intimation, cause the building to be inspected by himself or by an officer authorized by him in his behalf in order to ensure that the building has been completed in accordance with the provisions of these building bye-laws and / or the total authorized floor space of the building which existed before has not been exceeded, as the case may be.
- 40.4.2 If the Chief Executive Officer fails to issue completion certificate within a period of thirty days after the receipt of the intimation of completion as at Appendix H, such certificate shall be deemed to have been granted.
- 40.4.3 The building shall not be occupied unless a completion certificate is issued by the Chief Executive Officer or an officer authorized by him in this behalf in terms of Appendix H.

**Note**: The floor space of the building relevant to this byelaws shall mean the Cubic Capacity of the building on all floors.

## 41 REMOVAL OF CONGESTED BUILDINGS

The Board may appoint a committee as prescribed under Section 142 of the Act to inspect any blocks of buildings in the Cantonment which are in an unhealthy condition or are overcrowded or due to the narrowness or closeness of the street the cleansing of the drainage or ventilation is affected which endangers the public health. Such cases may be indicated on a plan verified by the Executive Engineer of the Board and referred to the Board, after scrutiny and following due process, who may order the same to be removed by serving a notice on the HORs / Lessee as prescribed under the Act. However, the Board shall make compensation as it deems fit to the owners or owner for any buildings so removed, as per estimates to be prepared by the Board.

Provided that the owner/HOR/Lessee of such site shall have to alter the dwelling units in terms of the building byelaws if the Committee so directs for which no compensation will be payable.

## 42 OVER CROWDING OF DWELLING HOUSES.

If in the opinion of the Board, on a report to be submitted by a Committee to be formed in the same manner as prescribed at Section 142 of the Act,

any building or part thereof used as a dwelling house is so over-crowded as to endanger the health of the inmates it may issue orders for abating the over- crowding of the same by reducing the number of lodgers, tenants or other inmates as specified under section 143 of the Act.

Provided that the owner/HOR/Lessee of such site shall have to alter the dwelling units in terms of the building byelaws if the Committee so directs for which no compensation will be payable. Failure to compliance of the directions of the Board shall be punishable with fines as prescribed under the Act.

### 43 POWER TO REQUIRE REPAIR OR ALTERATION OF BUILDING.

If a building in a Cantonment is so ill-constructed or dilapidated and is in insanitary state the Board may initiate action by issuing notice as prescribed under section 144 of the Act directing the owner to execute such repairs for removing the defects in the building.

Provided that the Chief Executive Board may direct the HOR / Lessee of such site to reconstruct the building as per the Building Bye-laws of the Board.

# 44 POWER TO REQUIRE BUILDINGS, WELLS ETC TO BE RENDERED SAFE.

If any building or wall or anything affixed thereto or any well, tank, reservoir, pool, depression, or excavation or any Bank or tree, in the opinion of the Chief Executive Officer is in a ruinous state for want of sufficient repairs, protection or enclosure and is a nuisance or dangerous to persons passing by or dwelling or working in the neighbourhood the Chief Executive Officer may issue notice under Section 297 of the Act, directing HOR / Lessee / the Occupier to remove the same or carry out requisite repairs or protect or enclose the same in such a manner to render it safe.

Provided that the Chief Executive Officer on failure to comply with the directions shall take forthwith such steps as necessary to avert any accident etc at site.

### 45. USAGE OF BUILDINGS TO BE AS PER LAND USE PLAN

Sanction of a building plan for the intended use as given in the building plan shall be in accordance with the Land Use Plan prepared by the Cantonment Board as per Section 233 of the Act.

### 46. LEVYING OF DEVELOPMENT CHARGES FOR SANCTIONED PLANS -

The development charges for sanctioned plans in respect of erection, reerection, re-construction of buildings shall be as fixed by the Board from time to time. The Development Charges shall be made applicable on all Government owned buildings in the Cantonment and will be exempted on request of the Competent Authority.

The Board may revise the Development Charges / levy scrutiny charges at their discretion from time to time and shall be applicable after such revision.

### 47. ADHERENCE TO THE PLAN SANCTIONED BY THE CEO / BOARD

The applicant shall submit a notarized affidavit to the effect that he shall strictly adhere to the plan sanctioned by the CEO / Board. Further the CEO / Board shall be at liberty to demolish the unauthorized constructions under the Provisions of the Cantonments Act, 2006 and initiate action under the provisions of PPE Act, 1971 or as amended from time to time.

### 48. MODIFICATIONS / AMENDMENTS FOR UPDATING BUILDING BYELAWS

- 48.1 The Cantonment Board may carry out amendments / modifications / changes in the Building Byelaws every five years or earlier as per requirement and proposals for amendment will be initiated / approved under the provisions of the Act and amendments made to it from time to time.
- 48.2 Where there are separate layout byelaws approved by the Competent Authority in addition to Building Byelaws, governing construction activities inside Cantonments, those shall be amended wherever required within 06 (six) months of notification of these Byelaws keeping in view the provisions made in these Byelaws.

Provided that if there is inconsistency in the norms prescribed for FAR, setbacks and height restrictions between what is prescribed in these Byelaws and those prescribed in the existing layout byelaws, the provisions made in these Byelaws shall prevail.

# 49.PENALTY FOR BREACH OF BYE-LAWS AND UNAUHTORIZED CONSTRUCTIONS

Any person who contravenes any of the provision of these byelaws and continues with the unauthorized construction shall be punishable:-

- a. With fine which may extend to five thousand rupees; or
- b. With a fine which may extend to five thousand rupees and, in the case of continuing contravention, with an additional fine which may extend to five hundred rupees for every day during which such contravention continues after conviction for the first such contravention; or

c. With fine which may extend to one hundred fifty rupees for every day during which the contravention continues after the receipt of a notice from the Board or Chief Executive Officer by the person contravening the bye-law requiring such person to discontinue such contravention.

Notwithstanding anything mentioned above, the levying of penalty does not regularize the unauthorized constructions unless it is regularized by the Competent Authority.

### 50. REPEAL AND SAVINGS -

- 50.1 The byelaws regulating erection and re-erection of buildings in Amritsar Cantonment published in the Gazette Notification Part II Section 4, Government of India in the late Defence Department SRO No. 18567 dated 30.05.1922 are hereby repealed.
- 50.2 Notwithstanding such repeal anything done or any action taken under the said byelaws shall remain valid / lawful.
- 50.3 Where there is contradiction between the provisions of the Act and these Byelaws, the provisions of the Act shall prevail.

Chief Executive Officer
Amritsar Cantonment Board

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Chief Executive Officer

Amritsar Cantonment Board

## **CHAPTER - VI**

## **GROUP HOUSING**

The following Building Byelaws for Group Housing are framed as provided for in Section 260 of the Act:-

# 51. BUILDING NORMS: -

# 51.1 Sizes of plot , ground coverage, FAR & Maximum heights :-

Minimum size of the plot 3000 sqm

Maximum ground coverage 35 %

Maximum FAR 1.25 ( Higher FAR

may be given depending on the

pattern of

development which should not exceed

1.50)

Maximum Height 15 m (For plot sizes

upto 4000 sqm) & 26m (For plots above 4000 sqm)

### Note:

- a. Basement if constructed is to be used for parking purposes only and should conform to Building Byelaws No. 29.11.
- b. The heights prescribed should conform to the table mentioned at Appendix M.

# 51.2 Recreational / Open spaces :-

a. 10 % of the entire holding area shall be reserved as recreational open Space if the plot area is 2000 sqm & above . This open space should be easily accessible from internal means of access. This area shall not be deducted for computation of FAR.

b. The width of means of access shall be as under

| Sr. No. | Width of means of access in Mts. | Length of means of<br>Access in Mts. |
|---------|----------------------------------|--------------------------------------|
| (i)     | 6.0                              | 75                                   |
| (ii)    | 7.5                              | 150                                  |
| (iii)   | 9.0                              | 300                                  |
| (iv)    | 12.0                             | Above 300                            |

c. Minimum front set back distance from the internal means of accesses should be as under: -

| Sr. No. | Maximum ht. of Building in Mts. | Minimum front<br>Setback in Mts. |
|---------|---------------------------------|----------------------------------|
| (i)     | 15.0                            | 1.50                             |

- d. For Group Housing Scheme in plots of one Hectare or more area, convenient shopping shall be provided. The shops shall not have an area less than 6 sqm and more than 20 sqm each and shall comprise of the following shopping activities only.
  - i. Food grain shop ( Ration shop ) and groceries and general provisions
  - ii. Pan shops

- iii. Tailors
- iv. Hair dressing saloon and Beauty Parlour
- v. Vegetable & Food stalls
- vi. Milk shops
- vii. Florists
- viii. Small Bakeries
- ix. Newspaper stalls
- x. Books & stationery etc.
- xi. Medicine and Chemist shops
- xii. Plumbers, Electricians, Television & Video equipments repair shops and Video Libraries.
- xiii. Public Communication Offices / Standard Trunk Dialing , other equipments based communication facilities.
- xiv. Tea & Snacks Shops
- xv. Sweet Shops

Note: Trade License as required under the Cantonment Act 2006 shall be applicable.

- e. For Group Housing Schemes in plots of 3 Hectare or more area, 5 % of the plots shall be provided as amenity space. A convenient shopping may be provided in the Amenity space.
- f. In Group Housing Schemes, Row Housing Schemes where internal means of access from planning point of view, are required to be continued for proper development of adjoining lands, the Cantonment Board may insist on larger width in such cases, front setbacks shall be as per the decision of the Board.
- g. The provision of internal roads, street lights, water pipe lines, underground drainage and garbage bins etc. shall be made available for plots of 2000 sqm and more area before obtaining final completion certificate to the satisfaction of the Chief Executive Officer.

# 51.3 **Projection into Open spaces**:-

51.3.1. All open spaces provided either in interior or exterior shall be kept free from any erections thereon and shall open to the sky. Nothing except cornice, chhajja or weather shed (not more than 0.75 m wide) shall overhang or project over the said open space so as to reduce the width to less than minimum required.

Note: Such projections shall not be allowed at height less than 2.2 m from the corresponding finished floor level.

- One canopy per block on the ground floor not exceeding 4.5 m in length & 2.4 m in width is permissible.
- 51.3.3 Balcony at roof slab level of 1.2 m width and area not exceeding 3.5 sqm per bedroom but not exceeding 3 in number per flat is permissible.
- 51.3.4 Balcony having entrance from the toilet / bathroom & width as 1.2 m for drying clothes.

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## **CHAPTER - VII**

## **ROW HOUSING**

# 52 - Row Housing

Row House means one of a series of houses, often of similar or identical façade situated side by side and/ or joined by common walls.

Row Housing means Row of houses with only front, rear and interior open space.

If a person(s) intends to combine their individual properties that are smaller in size and also not feasible for independent reconstruction or otherwise, may apply for sanction of building plan as per row housing in which case, the following norms shall apply –

| 1 | Minimum combined area of plot | 210 sq m   |  |
|---|-------------------------------|--|--|
|   | Maximum area of each plot     | 108 sq m   |  |
| 3 | Building coverage             |  |  |
| 4 | Floor Space Index             | As applicable to individual plots (Refer Table 2 & Appendix M)   |  |
| 5 | Number of floors              |  |  |
| 6 | Minimum road width            |  |  |
| 7 | Set backs minimum             | Front: 2.00 m<br>Rear: 1.50 m<br>Side: 2.00 m only for end units |  |

**Note:** The maximum number of units shall be 12 and the minimum number of units shall be 3.

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TABLE NO. 1 **COLOURING OF PLANS** 

| SI | Item                       | Site Plan            |                      |                      | Building Plan        |                      |                      |
|----|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|    | Document Type              | White Plan           | Blue Print           | Ammonia              | White Plan           | Blue Print           | Ammonia              |
| a  | b                          | c                    | d                    | e                    | f                    | g                    | h                    |
| 1  | Plot Lines                 | 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         | Thick dotted         | Thick dotted         | 5-95                 | <del>-</del>         | 55'-50               |
|    |                            | black                | black                | black                |                      | (v                   |                      |
| 5  | Open spaces                | No colour            |
| 6  | Existing work              | Black                | White                | Blue                 | Black                | White                | Blue                 |
| 7  | Work proposed to be        | Yellow               | Yellow               | Yellow               |                      | Yellow               | Yellow               |
| 8  | Proposed work (see Note 1) | Red filled in        | Red                  | Red                  | Red                  | Red                  | Red                  |
| 9  | Drainage and sewerage      | Red dotted           |
| 10 | Water supply work          | Black dotted<br>thin | Black dotted<br>thin | Black dotted<br>thin | Black<br>dotted thin | Black<br>dotted thin | Black<br>dotted thin |

# Notes:

<sup>1</sup> 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.

# **TABLE NO.2**

# MINIMUM OPEN SPACES, SET-BACKS AND PERMISSIBLE HEIGHTS APPLICABLE FOR ALL AREAS OF THE CANTONMENT

# (SEE BYE-LAW 26)

1(a). The minimum set-backs and permissible heights for all the area of the Cantonment shall be as per the table given below:-

| Sr.<br>No. | Plot size*<br>( in Sqm)  | Building line or minimum front set back (in mtr.) to be left  Abutting road width |                               |                               | Minimum set back on any one remaining side, if there is a open space / lane / street abutting the plot |     |
|------------|--|---|-------------------------------|-------------------------------|--|-----|
|            |  | Upto<br>12m   | Above<br>12m &<br>upto<br>18m | Above<br>18m &<br>upto<br>24m | 24m & above  |     |
| 1          | 2  | 3   | 4                             | 5                             | 6  | 7   |
| 1          | <than 50<="" td=""><td>1.0</td><td>1.0</td><td>3</td><td>3</td><td>-</td></than> | 1.0   | 1.0                           | 3                             | 3  | -   |
| 2          | 51 – 100   | 1.5   | 1.5                           | 3                             | 3  | -   |
| 3          | 101 – 300  | 1.5   | 1.5                           | 3                             | 3  | 1.5 |
| 4          | 301 - 400  | 3   | 4                             | 5                             | 6  | 1.5 |
| 5          | 401 – 500  | 3   | 4                             | 5                             | 6  | 2.5 |
| 6          | 501 – 600  | 3   | 4                             | 5                             | 6  | 3.0 |
| 7          | 601 – 750  | 3   | 4                             | 5                             | 6  | 3.0 |
| 8          | 751-1000   | 3   | 4                             | 5                             | 6  | 5.0 |
| 9          | 1001-1500  | 3   | 4                             | 5                             | 6  | 5.5 |
| 10         | 1501-2500  | 3   | 4                             | 5                             | 6  | 6.0 |
| 11         | 2501 &<br>above  | 3   | 4                             | 5                             | 6  | 7.0 |

### NOTE -

- i. The Minimum set back on the rear side shall be 1.0 m for all sizes of plots exceeding 101 sq.mtrs.
- ii. If the length or width of the plot exceeds 15m, the setbacks to be left around the building excepting front of the plot shall be as under –

| Sr.<br>No. | Height of the building (in metres) | Open spaces to be left around the building excepting front of plot (in metres) |
|------------|------------------------------------|--|
| 1          | 2                                  | 3  |
| 1          | Upto 10                            | 3  |
| 2          | 11 to 15                           | 5  |
| 3          | 16 to 18                           | 6  |

**Note:** If the length or depth of the building exceeds 40 metres add to column 3, 10% of length or depth of building minus 4.0 metres.

- iii. Set back for road widening shall be considered on the façade where the elevation of the building is proposed as per the road widening programme of the Board.
- iv. In case of two separate buildings or two wings of the building in the same plot, the set back between the two buildings shall be 3.0 mtrs.
- v. Height of stilt floor will not be counted while calculating the over all height of the building.
- vi. In case of two or more Holders of Occupancy Rights (HORs) / Lessees / Owners are submitting a proposal as a special request for reconstruction of the buildings located in a row as a combined proposal, the same shall be considered after amalgamation of the properties and side margins are to be given as if for a single unit of building. However, the minimum combined areas of the amalgamated plots should be less than 210 sq.mtrs. If higher than 210 sq.mtrs., the same shall be considered as per Byelaws pertaining to Row Housing.
- vii. No projections are permitted into the open spaces and such spaces shall be kept free from any erection thereon to ensure emergency services.
- viii. No openings for the purpose of light and ventilation are permitted into the adjoining plot / plots.
- ix. No balcony projection shall be allowed to extend on the minimum set-backs. These if provided shall be within the minimum setback required to be left. However, a portico without access to the top may be considered in the front open space.
- x. If the size of the plot is less than 25 sq. mtrs. so as not to allow application of norms of set-backs, the CEO shall decide as to what minimum set-backs have to be applied for reconstruction / addition / alteration on such site keeping in view location, road widening scheme of the Cantonment Board of that locality.

### PARKING SPACES

# (SEE BYE-LAW NO.28)

| Sr<br>No | Category of Building / Activity                                     | Per 100 Sq<br>mtrs of area |
|----------|---|----------------------------|
| 1        | Residential: In plots of 250 square metres and above*               | 1.00 ECS                   |
| 2        | Residential Group housing   | 2.00 ECS                   |
| 3        | Offices and Courts  | 1.80 ECS                   |
| 4        | Sub-city commercial area, Hotel & service apartment                 | 3.00 ECS                   |
| 5        | Local and convenience shopping centre                               | 2.00 ECS                   |
| 6        | Primary, Middle and Secondary School                                | 1.33 ECS                   |
| 7        | Senior Secondary School   | 2.00 ECS                   |
| 8        | Hospital, Nursing Home, Maternity Home, Diagnostic Center &         | 2.00 ECS                   |
|          | Medical College   |                            |
| 9        | College, Vocational Training Institute & Professional College       | 1.33 ECS                   |
| 10       | Post Office, telephone exchange and fire station                    | 1.33 ECS                   |
| 11       | Old age home, orphanage, working persons hostels                    | 1.80 ECS                   |
| 12       | Multipurpose community hall and Banquet hall                        | 3.00 ECS                   |
| 13       | Club, Auditorium and Religious building                             | 2.00 ECS                   |
| 14       | Exhibition hall and conference facility                             | 2.00 ECS                   |
| 15       | * 2 ECS shall be provided per plot in residential plots less than 2 | 50 square                  |
|          | metres. (ECS- Equivalent Car Space)                                 |                            |

### Note:

These parking norms shall be applicable for all new applications for building plan sanctions.

- i) This parking can be provided in any manner i.e. covered, under stilts or open. In providing the parking, care has to be taken that 50% of the open space in plots which are above 1000 square metres is left for hard and soft landscaping and not accounted in parking calculations.
- ii) The area of each ECS shall be as follows:
- (a) Basement: 32 square metre.
- (b) Stilts: 28 square metre.(c) Open: 23 square metre.
- (d) Multi-level with ramps: 30 square metre.
- (e) Automated multilevel with lifts: 16 square metre.

TABLE NO. 4

**OCCUPANT LOAD** 

| Sr.No Group of Occupancy |  | Occupant load Gross<br>Area in M2/person* |        |  |
|--------------------------|--|---|--------|--|
| (1)                      | (2)  |   | (3)    |  |
| 1                        | <br>Residential  |   | 12.5   |  |
| 2.                       | Educational  |   | 4      |  |
| 3                        | Institutional  | 15+                                       |        |  |
| 4.                       | Assembly <ul><li>(a) With fixed or looses and dance floor</li><li>(b) Without seating facilities including dining room</li></ul> | 6++<br>m 1.5++                            |        |  |
| 5.                       | Mercantile: (a) Street floor and sales basement (b) Upper sales floors   |   | 3<br>6 |  |
| 6.                       | Business and industrial  |   | 10     |  |
| 7.                       | Storage  |   | 30     |  |
| 8.                       | Hazardous  |   | 10     |  |

The gross area shall mean plinth are of covered area

- + Occupant load in dormitory portions of homes for the aged orphanages, insane, asylums etc. where sleeping accommodation is provided, shall be calculated at not less than 7.5 m2 gross area/persons.
- ++ The gross area shall include in addition to the main assembly rooms or space, any occupied connecting rooms or space in the same storeys above or below, where entrance is common to such rooms and spaces and they are available for use by the occupants of the assembly place. No deductions shall be made in the gross area for corridors, closets or other sub divisions, the area shall include all space serving the particular assembly occupancy.

TABLE NO. 5
OCCUPANTS PER UNIT EXIT WIDTH

Sr.No.Group of Occupancy **Number of Occupants** (1) (2) **Stairways** Ramps **Doors** 1. Residential 25 75 50 75 2. Educational 25 50 3. Institutional 25 50 75 Assembly 50 60 4. 40 **Business** 5. 50 60 75 6. Mercantile 50 60 75 Industrial 50 60 75 7. 8. Stores 75 50 60 9. Hazardous 25 30 40

TABLE NO .6

# PER CAPITA WATER REQUIRMENTS FOR VARIOUS OCCUPANCIES/USE.

(**SEE BYE-LAW NO. 37.2**)

| Sr.<br>No. | Type of occupancy  | Consumption per<br>head per day<br>(in liters) |  |
|------------|--|--|--|
| 1          | 2  | 3  |  |
| 1.         | Residential a) In living units b) Hotel with lodging accommodation (per bed)   | 135<br>100                                     |  |
| 2.         | Educational a) Day schools b) Boarding Schools   | 045<br>135                                     |  |
| 3.         | Institutional (Medical Hospital) a) No. of beds not exceeding 100 b) No. of beds exceeding 100 c)Medical quarters and hotels | 340<br>450<br>135                              |  |
| 4.         | Assembly-Cinema theatres, Auditoria etc. (Per seat of accommodation)   | 015  |  |
| 5.         | Government or semi-public business   | 045  |  |
| 6.         | Mercantile (Commercial) a) Restaurants (per seat) b) Other business buildings  | 010<br>45                                      |  |
| 7.         | Industrial  a) Factories where bathrooms are to be p b) Factories where bathrooms are require                                | ed to be                                       |  |
|            | provided   | 30   |  |
| 8.         | Storage (including ware housing)   | 30   |  |
| 9.         | Hazardous  | 30   |  |

### TABLE NO. 7

# **FLUSHING STORAGE CAPACITIES.**

| Sr.<br>No. | Classification of Buildings  | Storage capacity   |
|------------|--|--|
| 1          | 2  | 3  |
| 1.         | For tenements having common Convenience                                    | 900 liters net per WC seat.  |
| 2.         | For residential premises other than<br>Tenements having common convenience | 270 liters net for one ce WC seat and 180 liter For each additional. |
| 3.         | For factories and workshops.   | 900 liters per WC seat and 180 liters per urinal seat.               |
| 4.         | For cinemas, public assembly   | 900 liters per WC seat and 350 liters per urinal seat.               |

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# TABLE NO. 8

#### **DOMESTIC STORAGE CAPACITIES.**

| Sr.N | o. No. of floors Storage        | Rer                            | marks                                   |
|------|---------------------------------|--------------------------------|---|
|      | _                               | Capacity                       |   |
| (1)  | (2)                             | (3)                            | (4)                                     |
| For  | premises occupied as Tenemen    | ts with common c               | onveniences                             |
| 1.   | Floor 1 (Ground)                | Nil                            | Provided downtake fitting are installed |
| 2.   | Floors 2,3,4,5 and upper floors | 500* litres.<br>per tenements. | -                                       |
| For  | premises occupied as Flats or E | Blocks                         |   |
| 1.   | Floor 1                         | Nil                            | Provided downtake fitting are installed |
| 2.   | Floors 2,3,4,5 and upper floors | 500* litres.                   | -                                       |

NOTE: 1- If the premises are situated at a place higher than the road level in front of the premises, storage, at ground level shall be provided on the same lines as on floor 2.

NOTE: 2 – The above storage may be permitted to be installed provided that the total domestic storage calculated on the above basis is not less than the storage calculation on the number of downtake fittings according to the scales given

Downtake taps 70 liters each Showers 135 liters each Bathtub 200 liters each

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<sup>\*</sup> Subject to provisions of water supply and drainage rules.

#### **TABLE NO-9**

# **SANITATION REQUIREMENTS FOR HOTELS**

| Sl. No. | Sanitary Unit  | For Residential   | For non residential Staff   |  |  |
|---------|--|---|---|--|--|
|         |  | Public staff  | For male  | For female   |  |
| 1,      | Water Closet (W.C.)  | One per 8 Persons<br>omitting occupants of<br>the attached water<br>closet minimum of 2 if<br>both sexes are lodged | 1 for 1-15 persons<br>2 for 16-35 persons<br>3 for 36-65 persons<br>4 for 66-100 persons  | 2 for 1-12 persons<br>4 for 13-25 persons<br>6 for 26-40 persons<br>8 for 41-57 persons<br>10for 58-77 persons<br>12for78-100 persons<br>Add 1 for every 6<br>persons or part thereof. |  |
| 2.      | Ablution Taps  | One in each W.C.  | One in each W.C.  | One in each W.C.   |  |
| 3.      | Urinals  | Nil   | Nil upto 6 persons<br>1 for 7-20 persons<br>2 for 21-45 persons<br>3 for 40-70 persons<br>4 for 71-100 persons                        | Nil  |  |
| 4.      | Wash Basins One per 10 persons omitting each basin installed in the room / suite |   | 1 for 15 persons 1 for 1-12<br>2 for 16-35 persons 2 for 13-25<br>3 for 36-65 persons 3 for 26-40<br>4 for 66-100 persons 4 for 41-57 |  |  |
| 5.      | Baths  | One per 10 persons,<br>less occupants of room<br>with bath in suite   |   | Nil  |  |
| 6.      | Cleaner's Sinks  | One per 30 Bed rooms<br>(one per floor<br>minimum)  | Nil   | Nil  |  |
| 7.      | Kitchen Sink   | One in each Kitchen   | One in each Kitchen   | One in each Kitchen  |  |

#### TABLE NO. 10

# SANITATION REQUIREMENTS FOR EDUCATIONAL OCCUPANCY (SEE BYE-LAW NO. 33)

Table 4.11 Sanitation Requirements for Educational Occupancy

| Sl. No. | Sanitary Unit               | Boarding                                      | Institution                        | Other Educational Institution                 |   |  |
|---------|-----------------------------|---|------------------------------------|---|---|--|
|         |                             | For Boys                                      | For Girls                          | For Boys                                      | For Girls                                     |  |
| 1.      | Water Closet (W.C.)         | One for 8 boys<br>or part thereof             | One for 6 girls or<br>part thereof | One for 40 boys<br>or part thereof            | One for 25 girls or<br>part thereof           |  |
| 2.      | Ablution Taps               | One in each W.C.                              | One in each W.C.                   | One in each W.C.                              | One in each W.C.                              |  |
| 3.      | Urinals                     | One per every<br>25 pupils or part<br>thereof | · <del></del>                      | One per every 20<br>pupils or part<br>thereof | S <del>ees</del>                              |  |
| 4.      | Wash Basins                 | One for every 8<br>pupils or part<br>thereof  |                                    | One for every 60<br>pupils or part<br>thereof | One for every 40<br>pupils or part<br>thereof |  |
| 5.      | Baths                       | One for every 8<br>pupils or part<br>thereof  | 이 아이들이 얼마를 보는 그래요요요 하나 나를 다고 있다.   | <del>77</del> 48                              | 270   |  |
| 6.      | Drinking Water<br>Fountains | One for every 50<br>pupils or part<br>thereof |                                    | One for every 50<br>pupils or part<br>thereof | One for every 50<br>pupils or part<br>thereof |  |
| 7.      | Cleaner's Sink              | One per Floor<br>minimum                      | One per Floor<br>minimum           | One per Floor<br>minimum                      | One per Floor<br>minimum                      |  |

#### TABLE NO. 11

#### SANITATION REQUIREMENTS FOR INSTITUTIONAL (MEDICAL) OCCUPANCY-HOSPITALS

(SEE BYE-LAW NO.33)

Table 4.12 Sanitation Requirements for Institutional (Medical) Occupancy- Hospital

| Sl. No. | Sanitary Unit  | Hospitals With  | Hospitals With outdoor Patient Wards               |   |  |  |
|---------|--|---|--|---|--|--|
|         |  | indoor Patient<br>Ward For Males &<br>females                                   | For Males  | For Females                                 |  |  |
| 1.      | Toilet Suite<br>(1WC+1Washbasin+<br>1shower)                         | Private room upto 4<br>persons  | For up   | oto 4 patients                              |  |  |
| 2.      | Water Closet (W.C.)  | One for every 8 beds<br>or part thereof   | One for every 100<br>persons or part<br>thereof    | One for every 25 persons<br>or part thereof |  |  |
| 3.      | Ablution taps  | One in each W.C.  | One in each W.C.                                   | One in each W.C.                            |  |  |
| 4.      | Wash Basins  | Two upto 30 bed;<br>add one for every<br>additional 30 beds; or<br>part thereof | One for every 100<br>persons or<br>part<br>thereof | One for every 25 person                     |  |  |
| 5.      | Baths with Shower  | One bath with<br>shower for every<br>8 beds or part<br>thereof.                 |  |   |  |  |
| 6.      | Bed pan washing<br>sink  | One for each ward   |  |   |  |  |
| 7.      | Cleaner' Sinks   | One for each ward   | One per floor<br>minimum                           | One per floor minimum                       |  |  |
| 8.      | Kitchen sinks & dish<br>Washers<br>(where<br>Kitchen is<br>provided) | One for each ward   | <u> </u>   | 577.5                                       |  |  |
| 9.      | Urinals  | One for 30 beds<br>(male wards)   | One for every 50<br>persons or part<br>thereof     | I—  |  |  |
| 10.     | Drinking water fountain  | One for each ward   | One for 500 p                                      | ersons or part thereof                      |  |  |

#### TABLE NO. 12 SANITATION REQUIREMENTS FOR INSTITUTIONAL (MEDICAL) OCCUPANCY-HOSPITALS

(STAFF QUARTERS & HOSTELS)

Table 4.13 Sanitation Requirements for Institutional (Medical) Occupancy- (staff quarters and Hostels)

| Sl. No. | Sanitary Unit           | Doctor's D                                 | ormitories                                    | Nurses Hostel   |  |  |
|---------|-------------------------|--|---|---|--|--|
|         |                         | For Male Staff                             | For female staff                              |   |  |  |
| 1.      | Water Closet            | One for 4 persons                          | One for 2 persons                             | One for 2 persons of<br>part thereof<br>Two for 13-25 |  |  |
| 2.      | Ablution Taps           | One in each W.C.                           | One in each W.C.                              | One in each W.C.                                      |  |  |
| 3.      | Wash Basins             | One for every 8<br>persons or part thereof | One for every 8<br>persons or part<br>thereof | One for every 8 persons or part thereof               |  |  |
| 4.      | Bath (with shower)      | One for every 4<br>persons or part thereof | One for every 4<br>persons or part<br>thereof | One for every 4 persons or part thereof               |  |  |
| 5.      | Cleaner's Sink          | One per floor<br>minimum                   | One per floor<br>minimum                      | One per floor<br>minimum                              |  |  |
| 6.      | Drinking water fountain | One for 100 persons or part thereof        |   | One for 100 persons<br>or part thereof                |  |  |

#### SANITATION REQUIREMENT FOR GOVERNMENT AND PUBLIC BUSINESS OCCUPANCIES AND OFFICES

Table 4.14 Sanitation Requirements for Governmental and Public Business Occupancy and Offices

|         | 2831                                 |  | 24 (580)  |  |  |
|---------|--------------------------------------|--|---|--|--|
| Sl. No. | Sanitary Unit                        | For Male Personnel   | For female Personnel  |  |  |
| 1.      | Water Closet (W.C.)                  | One for 25 persons or part thereof   | Two for 15 persons or part thereof                                |  |  |
| 2.      | Ablution taps                        | One in each W.C.   | One in each W.C.  |  |  |
| 3.      | Urinals                              | Nil upto 6 persons 1 for 7-20 persons 2 for 21-45 persons 3 for 46-70 persons 4 for 71-100 persons From 101 to 200 add @ 3%; For over 200 persons add @ 2.5%.        |   |  |  |
| 4.      | Wash Basins                          | One for every 25 persons or part<br>thereof  | One for every 25 persons<br>or part thereof                       |  |  |
| 5.      | Drinking water fountains             | One for every 100 persons with a minimum of one on each floor  | One for every 100 persons<br>with a minimum of 1 on<br>each floor |  |  |
| 6.      | Cleaner's Sinks                      | One per floor minimum; preferably in or adjacent to sanitary rooms.  |   |  |  |
| 7.      | Executive Room /<br>Conference Halls | Toilet Suite (1 WC, 1 washbasin, optional shower for 24 hr usages) Unit could be common for Male/Female or separate depending on the number of user of each facility |   |  |  |

Note: One water tap with drainage arrangements shall be provided / 50 persons or part thereof in the vicinity.

TABLE NO. 14

SANITATION REQUIREMENTS FOR RESIDENCES

| Sr.<br>No. | Fitments         |     | Dwellings with individual Conveniences | Dwellings with individual Conveniences            |  |
|------------|------------------|-----|--|---|--|
|            | 2                |     | 3                                      | 4   |  |
|            | Bath Room        | 1 p | provided with water tap.               | 1 for every two tenements                         |  |
| •          | Water- closet    | 1   |  | 1 for every two tenements                         |  |
| 3.         | Sink (or NAHANI) | 1   |  |   |  |
| ٠.         | Water Tap        | 1   |  | 1 with draining arrangements in each tenements    |  |
|            |                  |     |  | 1 in common bath rooms and common water –closets. |  |

#### TABLE NO. 15

#### SANITARY REQUIREMENTS FOR ASSEMBLY OCCUPANCY BUILDINGS

(CINEMA, THEATERS, AUDITORIA, ART GALLERIES, LIABRARIES & MUSEUMS)

\_\_\_\_\_

Table 4.18 Sanitation Requirements for Assembly Occupancy Buildings (Cinema, Theaters, Auditoria. Etc.)

| Sl. No. | Sanitary Unit              | For P  | ublic   | For Staff  |  |  |
|---------|----------------------------|--|---|--|--|--|
|         |                            | Male   | Female  | Male   | Female   |  |
| 1       | Water Closet               | One for 100 persons upto 400 persons. For over 400 persons, add at the rate of 1 per 250 persons or part thereof | Four for 100 persons upto 200 persons. For over 200 persons add at the rate of 1 per 50 persons or part thereof | One for 15 persons.  Two for 16-35 persons                                   | Two for 1-12 persons.  Four for 13-25 persons add at the rate of 1 per 6 persons or parthereof |  |
| 2       | Ablution Taps              | One in each W.C.   | One in each<br>W.C.   | One in each<br>W.C   | One in each<br>W.C   |  |
| 3       | Urinals                    | One for 50 persons or part thereof   | 3-5   | Nil upto<br>6 persons<br>One for 7-20<br>persons<br>Two for 21-45<br>persons | ( <del>- 1</del> )   |  |
| 4       | Wash Basins                | One for every<br>200 persons or<br>part thereof  | One for every<br>200 persons or<br>part thereof   | One for 1-15<br>persons<br>Two for 16-35                                     | One for 1-12<br>persons<br>Two for 13-25<br>persons  |  |
| 5       | Drinking Water<br>Fountain |  | One per 100 persor  | ns or part thereof   | 2002   |  |
| 6       | Cleaner's sink             |  | One per   | floor  |  |  |
| 7       | Shower/Bathing             |  | As per trade re   | equirements  |  |  |

Note:

i) One water tap with draining arrangements shall be provided for every 50 persons or part thereof in the vicinity of water closets and urinals.

ii) It may be assumed that two thirds of the number is males and one third females.

TABLE NO. 16

#### **SANITARY REQUIREMENTS FOR RESTAURANTS**

**Table 4.20 Sanitation Requirements for Restaurants** 

| Sl. No. | Sanitary Unit                  | For P  | ublic  | For Staff  |  |  |
|---------|--------------------------------|--|--|--|--|--|
|         |                                | Male   | Female   | Male   | Female   |  |
| 1.      | Water Closet<br>(W.C.)         | seats upto 200<br>seats. For over<br>200 seats, add<br>at the rate of 1<br>per 100 seats | One per 25<br>seats upto 200<br>seats. For over<br>200 seats, add<br>at the rate of 1<br>per 50 seats or<br>part thereof | persons.   | 2 per 1-12 persons.<br>4 for 13-25 persons.<br>6 for 26-40 persons.<br>8 for 41-57 persons.<br>10 for 58-77 persons.<br>12 for 78-100 persons. |  |
| 2.      | Ablution Taps                  | One in each  | One in each W.C.   | One in each W.C.   | One in each W.C.   |  |
| 3.      | Urinals                        | One for 50<br>persons or part<br>thereof   |  | Nil upto 6 persons.<br>1 for 7-20 persons.<br>2 for 21-45<br>persons.<br>3 for 46-70<br>persons.<br>4 for 71-100<br>persons. |  |  |
| 4.      | Wash Basins                    |  | One for  | every water closet   | •  |  |
| 5.      | Kitchen Sinks &<br>Dish Washer |  | One p  | er each Kitchen  |  |  |
| 6.      | Service Sink                   |  | One  | in the restaurant  |  |  |

#### Note:

- i) It may be assumed that two thirds of the numbers are males and one-third females.
- ii) One water tap with draining arrangements shall be provided for every 50 persons or part thereof in the vicinity of water closets and urinal.

# TABLE NO. 17 SANTATION REQUIREMENTS FOR FACTORIES

Table 4.21 Sanitation Requirements for Factories

| Sl. No. | Sanitary Unit                                | For Male Personnel  | For female Personnel   |  |  |
|---------|--|---|--|--|--|
| 1.      | Water Closet                                 | 1 for 15 persons 2 for 16-35 persons 3 for 36-65 persons. 4 for 66-100 persons. For 101 to 200 persons add at rate of 3%. From over 200 persons, add at the rate of 2.5%.                       | 2 for 1-12 persons 4 for 13-25 persons. 6 for 26-40 persons. 8 for 41-57 persons. 10 for 58-77 persons. 12 for 78-100 persons. For 101 to 200 persons, add at the rate of 3%. From over 200 persons add at the rate of 2%. |  |  |
| 2.      | Ablution Taps                                | One in each W.C   | One in each W.C.   |  |  |
| 3.      | Urinals                                      | Nil upto 6 persons 1 for 7-20 persons 2 for 21-45 persons 3 for 46-70 persons 4 for 71-100 persons From 101 to 200 persons add at the rate of 3%; for over 200 persons add at the rate of 2.5%. |  |  |  |
| 4.      | Washing Taps with<br>draining arrangement    | One for every 25 persons or part th   | nereof   |  |  |
| 5.      | Drinking Water<br>Fountains                  | One for every 100 persons with a r  | minimum of one on each floor   |  |  |
| 6.      | Baths Preferably<br>Showers                  | As required for particular trade or occupation  |  |  |  |
| 7.      | Emergency shower<br>and eye wash<br>fountain | 1 per every shop floor per 500 person   |  |  |  |

#### Note:

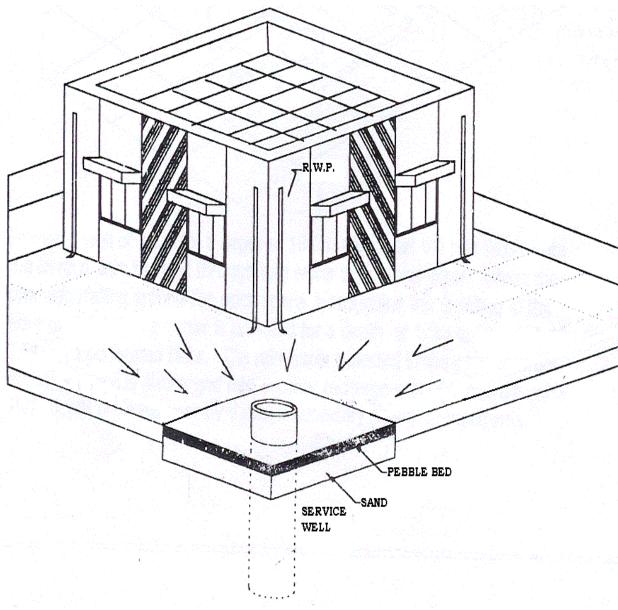
- For many trades of a dirty or dangerous character, more extensive provisions are required.
- ii) One water tap with draining arrangement shall be provided for every 50 persons or part thereof in the vicinity of water closet and urinal
- iii) Creche where provided shall be fitted with water closets (One for 10 persons or part thereof), wash basins (1 for 15 persons or part thereof) and drinking water tap with drinking arrangement for every 50 persons or part thereof

#### TABLE NO. 18

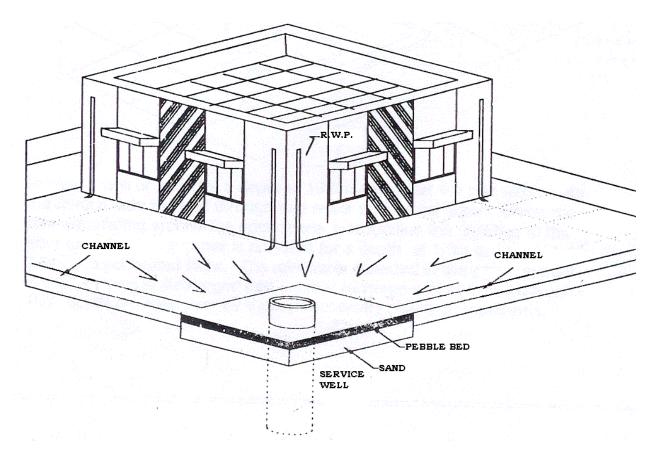
#### **METHODS OF RAIN WATER HARVESTING**

The Rain Water Harvesting methods may be adopted depending on the conditions and type of development. It shall be mandatory for all buildings on plots of size exceeding 100 sq. mtrs. The various methods of Rain Water Harvesting, which may be adopted are as under:-

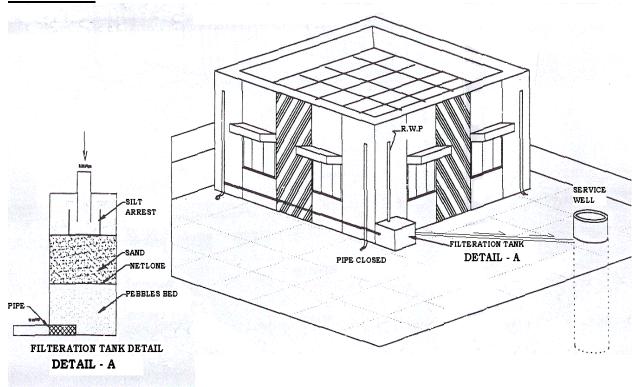
#### **METHOD I**



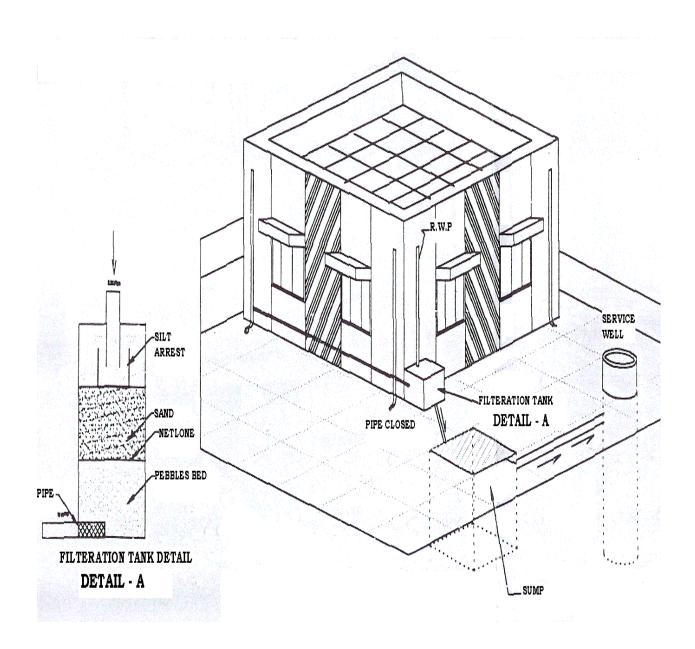
#### **METHOD-II**



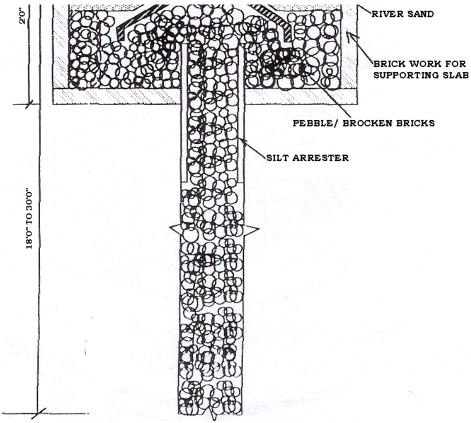
# **METHOD III**



# METHOD IV

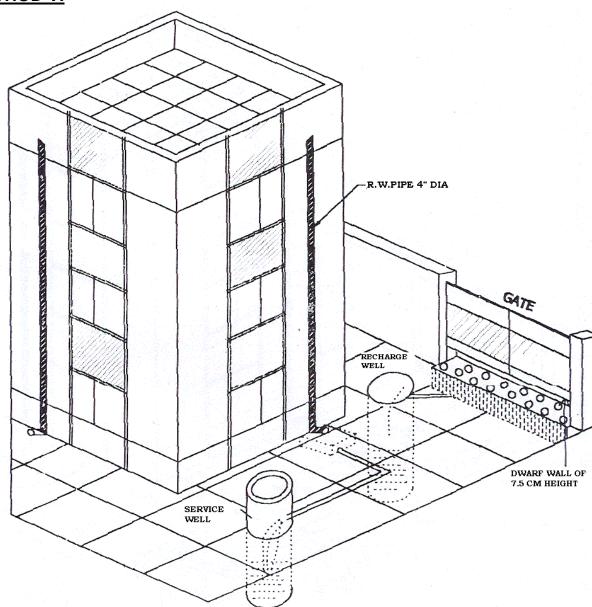


# METHOD V



THE CROSS SECTION VIEW OF A PERCOLATION PIT

### **METHOD VI**



Provide a well of 1.2m for a depth of 10.0m and divert the rain water from the terrace into the well through rain water down-take pipes. Divert the rain waterfalling around the open space surrounding the building to the front gate wherein a gutter is provided for a depth of 1.0m and a width of 0.6m with perforated slabs. The rain water collected in the gutter in front of the entrance is discharged into another recharge well of 1.20m dia. with 10m depth provided near by through necessary piping arrangements.

# **METHOD VII** R.W.PIPE 4" DIA GATE PERCOLATION DWARF WALL OF 7.5 CM HEIGHT PERCOLATION PIT SMALL PEBBLE SAND STONE BED 1'6" CHANNEL WELL

Dig a well of 1.2 m dia for a depth of 6.0m at the rear side of the house plot. Provide a 3.0 x 3.0 x 1.0m deep sand bed surrounding the well. In addition, build a .23 m wide trench around the building either near the compound wall or in the centre of the drive way. The depth of the trench may stary from .23 m near the gate(entrance) and run through 0.45 m at the rear end of the plot towards the well. The trench has to be connected to the deep sand bed constructed around the open well.

#### **APPENDIX 'A'**

#### FORM OF NOTICE

#### (SEE BYELAW NO. 4)

# FORM FOR APPLICATION TO ERECT A BUILDING UNDER SECTION 235 AND 236 OF THE CANTONMENTS ACT, 2006.

To

The Chief Executive Officer, Amritsar Cantonment Board Amritsar 143001.

Sir/Madam,

| l he<br>Building. | ereby give notice tha<br>House/Bungalow         | No. | of | Land     | situated  | at      |              |
|-------------------|---|-----|----|----------|-----------|---------|--------------|
| Cantonme          | ents Act, 2006 amend                            |     |    | antonino | it and in | accorda | ice with the |
|                   | rward herewith the ;<br>, in quadruplicate, si  |     | •  |          | ,         |         | 11) wherever |
|                   | Architect/Engineer/s<br>signs and copy of<br>I. |     | _  | •        |           |         | •            |

- 1. Key plan (location) plan
- 2. Site plan
- 3. Sub-division/layout plan
- 4. Building plan
- 5. Structural Plan
- 6. Ownership title
- 7. Clearance certificate of Tax arrears.
- 8. No objection certificate where required.
- 9. Certificates for structural design sufficiency, soil testing certificate, fire safety norms, rain water harvesting, provisions for disabled persons & solar power agency, as applicable.
- 10. Undertaking for water supply
- 11. Notarized Affidavit for plots above 300 sq. m. for mortgaging as prescribed.
- 12. Notarized Affidavit to the effect that in case of any violation from the sanctioned building plan, the Board can initiate action under Building Byelaw No. 48.

I propose to use the building for residential / commercial/ residential cum

Name of applicant \_\_\_\_\_

Address of applicant \_\_\_\_\_

| commercial purposes. The existing that the proposed construction revecute the work. |                        |      |  |
|---|------------------------|------|--|
| Dated   | Signature of applicant | <br> |  |

#### **APPENDIX A-1**

# FORMAT FOR SANCTION OF BUILDING PLAN UNDER SECTION 238 OF THE CANTONMENTS ACT, 2006 FOR INSIDE CIVIL AREA AS WELL AS OUTSIDE CIVIL AREA OF AMRITSAR CANTONMENT

| I. | DETAILS FOR PROCESSING & SANCTION | ING      | OF BI                 | JII DING PI  | ANS   |
|----|-----------------------------------|----------|-----------------------|--------------|-------|
|    |                                   | $\cdots$ | <b>U</b> I <b>U</b> V | /IEDII10   E | ./\\\ |

| 1. | Description of the property |  |
|----|-----------------------------|--|
|    | i.                          | House No/Bungalow No.                          |
|    | ii.                         | GLR Sy. No                                     |
|    | iii.                        | Area of the plot (as per GLR)                  |
|    | iv.                         | Nature of holders right                        |
|    | V.                          | Whether inside / outside notified civil area   |
|    | vi.                         | Date of expiry, if held on lease               |
|    | vii.                        | Name of recorded lessee / HOR/OWNERas per GLR  |
|    | viii.                       | Name of Applicant                              |
|    | ix.                         | Date of Application                            |
|    |                             |  |
|    | Filled a<br>Jr. Eng         | nd Checked by<br>r.                            |
| 2. | Report                      | / views as per Land Policy (Change of purpose) |
|    | i.                          | Encroachment on Government land, if any        |
|    | ii.                         | Sub-division of site, if any                   |

|    | iii.     | Change of purpose, if any  |               |
|----|----------|--|---------------|
|    | iv.      | Unauthorised construction, if any  |               |
|    |          |  |               |
|    | Filled a | nd Checked by<br>r.  |               |
| 3. | Report   | of the Revenue Section   |               |
|    | i.       | Whether taxes paid upto date, if not state the amount of arrears                               |               |
|    |          |  |               |
|    | Date :   |  | Revenue Clerk |
| 4. | Report   | of the Engineering Section   |               |
|    | a.       | Details on building plan   |               |
|    | i.       | Description of the proposal  |               |
|    | ii.      | Erection/Reconstruction / addition & alteration  |               |
|    | iii.     | Report on Building Byelaws   |               |
|    | iv.      | Purpose (Residential/Other / Commercial)   |               |
|    | V.       | Report on revised Land Policy  |               |
|    | vi.      | Any other information available in the file which can be important in sanctioning of the plan. |               |

Filled and Checked by Jr. Engr.

| b.                              | Area / FAR Statement  |  |  |
|---------------------------------|---|--|--|
| i.                              | Area of plot as per GLR   |  |  |
| ii.                             | Area of plot as per site condition                                    |  |  |
| iii.                            | Area to be demolished   |  |  |
| iv.                             | Proposed builtup area   |  |  |
| v.                              | FAR allowable   |  |  |
| vi.                             | FAR consumed  |  |  |
|                                 |   |  |  |
| Filled and Checked by Jr. Engr. |   |  |  |
| c. Check                        | s list of documents (Yes / No)  |  |  |
| i.                              | Latest copy of GLR Extract  |  |  |
| ii.Latest                       | copy of tax paid receipt  |  |  |
| iii.                            | Draft copy of Indenture Deed as per revised Land Policy of 09.02.1995 |  |  |
| iv.                             | Affidavit for parking   |  |  |
| V.                              | Photographs of the existing structure                                 |  |  |
| vi.                             | Copies of building plan submitted                                     |  |  |
| vii.                            | Cost of the proposed construction                                     |  |  |
|                                 | as per new Land Policy  |  |  |

Filled and Checked by Jr. Engr.

d. Recommendation of the Engineer

The building plans are in accordance with the Building Byelaws and Government Land Policy dated 09.02.1995. In view of the above report,

the building plans may be considered for sanction. Nothing adverse has been found in the file from sanction of building plan point of view.

|      |           | Jr. Engr.                                  |
|------|-----------|--|
|      | e.        | If not recommended, the reasons therefore: |
|      |           |  |
|      |           |  |
| Date | e:        |  |
|      |           |  |
|      | Jr. Engr  | •  |
| 5.   | Remark    | s of the Legal Advisor on the plan.        |
|      | _         |  |
|      | _         |  |
|      | _         |  |
|      | _         |  |
| 6.   | Direction | ns / Observations of CEO                   |
| i.   | Date :    |  |
|      | Directio  | ns:  |
| ii.  | Date :    |  |
|      | Directio  | ns:  |
| iii. | Date :    |  |
|      | Direction | ns ·                                       |

| iv. | Date:   |
|-----|---|
|     | Directions :  |
| 7.  | Order of the CEO dated  |
|     | Sanctioned / Not Sanctioned / Be sent to the DEO, Jalandhar/ Put up to the Board                              |
|     |   |
|     | Chief Executive Officer Amritsar Cantonment Board   |
| 8.  | Remarks of the DEO, if applicable from land point of view under Section 238 (3) of the Cantonments Act, 2006. |
|     | <u> </u>  |
|     |   |
|     |   |
|     |   |

Sanctioned / Not Sanctioned / Put up to the Board

Chief Executive Officer Amritsar Cantonment Board

#### **APPENDIX A-2**

#### CHECK LIST FOR APPLICANTS SEEKING BUILDING PERMISSION

The applicant has to check and submit the following and state so clearly indicating in the application form.

- 1. An application form as prescribed in Appendix 'A' of the Byelaws indicating the existing and proposed usage of the building / house.
- 2. The prescribed certificates for structural designs sufficiency for earthquake resistance, fire safety norms, solar energy, rain water harvesting and other prescribed directions of the byelaws along with plans.
- 3. The Building plans in 4 copies showing the key plan, the site plan, the floor plans, cross sections and elevations of the building.
- 4. A copy of the last sanctioned plan for verification.
- 5. The proforma I forms duly filled in along with the Building plans submitted in quadruplicate.
- 6. The form for certificate for structural designs sufficiency as per Proforma II of the Building Byelaws duly signed by the HOR/LESSEE/OWNER and the structural designer.
- 7. The ownership title document such as a copy of GLR of the property etc.
- 8. Upto date Tax Clearance Certificate.
- 9. No Objection Certificate, if required from any other Government authority. Also NOC from the adjoining HOR / Lessee / Owner of the property, if required, if the aspect of common wall for safety measures to be adopted by the applicant seeking building permission.
- 10. If required, adherence to Fire Safety Norms Certificate.
- 11. Rain water harvesting provisions if required as per Byelaws in the prescribed form.
- 12. Provisions for solar power energy if made in the building.

- 13. Form for specification of the proposed building as prescribed in Appendix 'B' of the Byelaws.
- 14. A confirmation stating whether open spaces, area and height limitations, set backs and side margins have been provided for as per Byelaw No. 26 and Table No. 2.
- 15. Confirmation regarding the provisions for parking as per Table No. 3.
- 16. Confirmation regarding the water requirements, storage requirements and sanitation requirements as per the Tables prescribed in the Byelaws.
- 17. Form for supervision as prescribed in Appendix 'C' of the Byelaws
- 18. The Building plans should be submitted through an Architect registered with Council of Architecture should be submitted.
- 19. Certificate to say that there is no litigation with the Board / Government regarding construction at site and that no case of composition / appeal regarding building activities at the site is pending for disposal.
- 20. Confirmation regarding any notice / direction received under Section 142, 143 & 144 of The Cantonments Act, 2006.
- 21. Confirmation regarding destruction of the building / houses by earthquake, flood or fire and any act of God and any direction received in this regard from the CEO.
- 22. Confirmation regarding any notice / direction received under Section 297 of the Act to restore the building / house.
- 23. Confirmation to submit the notices / forms at various stages of work at site i.e. Appendix F, G, H etc.
- 24. The applicant is required to give an undertaking that he will rectify or compensate damage done by him during the construction of building to any Government or private property.
- 25. A confirmation to submit an affidavit duly notarized to the effect that in case of any violation from the sanctioned building plan, the Board can initiate action as prescribed under Building Bye-law No.48.

\*\*\*\*\*\*\*\*\*\*

#### **APPENDIX A-3**

# CHECK LIST FOR PROCESSING BUILDING APPLICATIONS AT THE CANTONMENT BOARD OFFICE

- 1. Whether application in prescribed form as per Appendix 'A' of the Byelaws with requisite accompaniants has been submitted in 4 copies in ammonia prints.
- 2. Whether plans submitted have been drawn showing the key plans, the site plans, floor plans, cross sections, elevations, service plans etc through licensed Architect of the Board.
- 3. Whether the colouring notions of the plan are as per Table 1 of Byelaws.
- 4. To confirm the usage of the property.
- 5. To check the building plan sanctioned by the Board prior to the year 1984 to verify the claim made by the applicant particularly with respect to the authorized floor space and plot dimensions. In case the same is not available in the records of the Board, the applicant may be asked to submit the same. All claims made by the Applicant in the building application should be checked.
- 5. To check the old sanctioned plans as may be available to verify the claims made by the applicant particularly with respect to the authorized floor space and plot dimensions. In case the same is not available in the records of the Board the applicant may be asked to submit the same. All claims made by the applicant in the building application should be checked.
- 6. Whether structural plan showing details of RCC work with detailed design submitted.
- 7. Whether structural sufficiency as per Profoma 2 duly signed by Structural Engineer and the HOR submitted.
- 8. Whether the Architect has specified in the building plan, the type of building materials to be used in the building and whether they confirm to the Fire and Life Safety Norms.
- 9. Whether the Architect has indicated in the building plan provision for rain water harvesting, if the plot size exceeds 200 sq.mts. and certificate submitted to this effect.
- 10. Whether the Architect has made provision for waste water regarding system in case the discharge from the building is above 10,000 ltrs.

- 11. Whether specifications of the proposed building have been submitted in prescribed form set in Appendix 'B' of the Byelaws.
- 12. Whether clearance certificate from Revenue Department submitted regarding outstanding taxes.
- 13. Whether certificate of supervision in the prescribed form as per Appendix C submitted duly signed by Architect / Structural Engineer.
- 14. Whether indemnity bond for adhering to parking requirements.
- 15. In case of multi-storeyed building, more than 15 mtrs. height, additional requirement be shown pertaining to fire appliances, lift enclosures, fire lift, parking spaces, refuse areas, location of gen sets / Transformer, fire alarm system, details for static water storage tank and pump, fire fighting installations etc.
  - Whether a notarized affidavit has been taken from the HOR / Applicant before communication of sanction of the building plan as specified under Byelaws No. 4.
- 16. Whether a self-attestation letter has been taken from the HOR / Lessee as specified under Byelaws No. 23.1 before communication of the building sanction.
- 17. The technical staff of the Board should ensure that any building notice received from as applicant under Section 235 and 236 of the Act should be accorded priority and processed within the period of 30 days, in order to ensure that provisions of Section 238 (3) of the Act, are not attracted.

\*\*\*\*\*\*\*

#### **APPENDIX A-4**

#### CHECKING PROGRESS OF CONSTRUCTION AT SITE

- 1. The Technical staff is responsible to carry out the verification of the work in stages for ascertaining the progress of the work as per plan sanctioned.
- 2. To note the date for commencement of work as given by the applicant to compute period of completion.
- 3. To ensure that Building permission accorded by the CEO / Board is displayed at a conspicuous place at site.
- 4. To check works upto plinth level, on submission of Appendix 'G' to the CEO and if it is in order, to give permission for carrying out further construction work as per the sanctioned plans and as per Appendix G-1.
- 5. To check from time to time during the progress of construction, to ensure that the work is not carried out beyond the sanctioned plans and to take further action under the provisions of The Cantonments Act, 2006, if unauthorized construction is carried out.
- 6. To verify on completion of the work, whether the applicant has submitted the form in Appendix 'H' along with four copies of completion plans through the licenced Architect / Engineer / Structural Engineer as the case may be who has supervised the construction work.
- 7. To ensure that the occupancy certificate is issued if construction is completed as per the sanctioned plan and as per Appendix J as the case may be.
- 8. On receipt of drainage plan to accord permission for connection to the drainage line.

\*\*\*\*\*\*\*

# **APPENDIX 'B'**

# FORM FOR SPECIFICATION OF PROPOSED BUILDING

# (SEE BYELAW NO. 14)

# APPENDIX - C

# **FOR SUPERVISION**

(SEE BYELAW 18)

| То   |  |
|--|--|
| The Chief Executive Officer,<br>Amritsar Cantonment Board,<br>Amritsar 143001. |  |
| Sir,   |  |
| House/building No  | and that the work shall be carried out |
| Signature of Architect/<br>Civil Engineer/Structural Engineer/<br>Supervisor.  |  |
| Name of Architect/Civil Engineer/<br>Structural Engineer/Supervisor            |  |
|  | (IN BLOCK LETTERS)                     |
| Licence No. of Architect/Civil<br>Engineer/Structural Engineer/<br>Supervisor  |  |
| Date   |  |

# **APPENDIX 'D'**

# (SEE BYELAW 19)

# FORM FOR REFUSAL OF SANCTION OF BUILDING SANCTION

| To<br>                     |                            |  |
|----------------------------|----------------------------|--|
|                            | pplication No              | dated<br>ection/material alteration of a               |
| building/execution of work | c in House/Bungalo<br>Road | w No situated at<br>d/street in Amritsar Cantonment, I |
| 1                          |                            | <u> </u>   |
| 2                          |                            |  |
| 3                          |                            |  |
|                            |                            |  |
|                            |                            | EXECUTIVE OFFICER,                                     |
| Office No.                 | CANTO                      | ONMENT BOARD, AMRITSAR.                                |
| Office Stamp:              |                            |  |
| Date:                      |                            |  |

# APPENDIX 'E'

# (SEE SECTION 238 AND 243 OF THE ACT AND BYELAW NO.19)

# FORM OF SANCTION OF BUILDING PERMIT AND COMMENCEMENT CERTIFICATE

To,

- 7. Notice for completion certificate will be given to the CEO as prescribed under Appendix H of the Building Byelaws as required under Section 82 of the Cantonments Act, 2006 and completion certificate obtained as required under Section 246 of the Cantonments Act, 2006.
- 8. The part occupancy certificate / occupancy certificate should be submitted as prescribed under Appendix I & J of the Building Byelaws.
- No building or part thereof shall be occupied or allowed to be occupied or permitted to be used by any person for purpose other than for which it is sanctioned.
- 10. The work of drainage connection is to be carried out through an approved sanitary contractor and the connection to the Cantonment sewer / septic tank will be done under the supervision of the Board on payment of usual supervision charges.
- 11. You will allow inspection of the construction work to the CEO / authorised Officials deputed for the purpose from time to time.
- 12. The undersigned may revoke the building sanction issued under the provisions of the Byelaws, in case there has been any false statement or any misrepresentation of any material fact in the application on which the building sanction was based and the whole work executed on the basis of such as sanction shall be treated as unauthorized as per the Amritsar Cantonment Board Bye laws No. 20.
- 13. This is not a sanction for you to keep your building materials on Government land for which you have to apply and obtain separate approval.

|      | CHIEF EXECUTIVE OFFICER   |
|------|---------------------------|
|      | AMRITSAR CANTONMENT BOARD |
| Date |                           |

### **APPENDIX 'F'**

# (SEE SECTION 243 OF THE ACT AND BYELAW NO. 21.2)

### FORM FOR NOTICE FOR COMMENCEMENT OF WORK

Tο The Chief Executive Officer, Amritsar Cantonment Board, Amritsar 143001. Sir, I hereby state that the erection/re-erection or material alteration in building in House/Bungalow Road/Street No. \_\_\_\_\_ Amritsar Cantonment will be commenced on \_\_\_\_\_ as per your permission vide office communication No. \_\_\_\_\_ dated \_\_\_\_ Architect/Civil under the supervision of Engineer/structural Engineer in accordance with plans sanctioned. Signature of applicant \_\_\_\_\_ Name of Applicant \_\_\_\_\_ ( IN BLOCK LETTERS) Address of Applicant \_\_\_\_\_

Date \_\_\_\_\_

# APPENDIX 'G'

# ( SEE BYELAW NO. 21.4)

# FORM FOR INFORMING COMPLETION OF WORK UPTO PLINTH LEVEL

| То   |  |
|--|--|
| The Chief Executive Officer,<br>Amritsar Cantonment Board,<br>Amritsar 143001. |  |
| Sir/Madam  |  |
| I hereby inform you that the construction been completed in House No/Bungalo   | on up to plinth/column upto plinth level has |
|  | _ situated at                                |
| permission vide Cantonment Boa   |  |
| and in accordance with the sanctioned plan.                                    | under my supervision                         |
| further work.  | and permission given to proceed with the     |
| Signature of Architect/<br>Civil Engineer/Structural Engineer/<br>Supervisor.  |  |
| Name of Architect/Civil Engineer/<br>Structural Engineer/Supervisor            |  |
|  | ( IN BLOCK LETTERS)                          |
| Licence No. of Architect/Civil<br>Engineer/Structural Engineer/<br>Supervisor  |  |

# **APPENDIX 'G-1'**

# (SEE BYELAW 21.4)

# FORM OF APPROVAL OF WORK UPTO PLINTH LEVEL

| То  |   |
|---|---|
|   | _<br>_  |
| Sir,  |   |
| With reference to your intimation N   | lo dated construction work, upto plinth/column upto |
| plinth level in House/Bungalow No   | situated a  |
|   | , Amritsar Cantonment. I have to inform that        |
| the further work may be proceeded with proceeded with as the construction upto plin |   |
|   | Yours faithfully,                                   |
|   | CHIEF EXECUTIVE OFFICER AMRITSAR CANTONMENT BOARD   |
| Office Communication No.  |   |
| Office Stamp:   |   |

### **APPENDIX 'H'**

# (SEE SECTION 82 AND 242 OF THE ACT AND BYE LAW NO.21.5)

# FORM FOR COMPLETION CERTIFICATE

| То  |  |
|---|--|
| The Chief Executive Officer,<br>Amritsar Cantonment Board,<br>Amritsar 143001.  |  |
| Sir/Madam,  |  |
| I hereby certify that the erection/re-erebuilding/part buildingat   | ection or part/re-construction work in/on situated   |
| Road/Street   | Cantonment   |
|   | as been supervised by me and has been  |
| completed on according to communication No  | the plans sanctioned, vide office  |
| The work has been completed to my best somaterials (type and grade) have been used st Act and the Building bye-laws, conditions presbeen transgressed in the course of the wo completion plans, one of which is cloth moun which it has been erected/ re-erected or altered | atisfaction, the workmanship and all the rictly in accordance with the Cantonment scribed or orders issued thereunder have rk. I am enclosing three copies of the ted. The building is fit for occupancy for |
| I have to request you to arrange for th occupation of the building.   | e inspection and give permission for the   |
| Encl: As above<br>Date:   | Signature of Licensed Architect/<br>Engineer/Structural Engineer   |
|   |  |

Name, Address & Licence No. of Licensed Architect / Engineer / Structural Engineer

# **APPENDIX 'I'**

# (SEE BYE LAW NO. 21.6)

# FORM FOR ISSUE OF OCCUPANCY CERTIFICATE

| To,  |                     |                        |
|--|---------------------|------------------------|
|  |                     |                        |
|  | ouilding no         |                        |
| Building completed under th  | e supervision of    |                        |
| Licensed Architect/ Engineer/ to be occupied subject to the f  1 2 3 4 | ollowing conditions | is permitted           |
| One set of completion plan du  |                     | rith.                  |
| Officer No   |                     |                        |
| Date   |                     | hief Executive Officer |

**Amritsar Cantonment Board** 

# **APPENDIX 'J'**

# (SEE BYE LAW NO.21.6.1)

# FORM FOR INDEMNITY FOR PART OCCUPANCY CERTIFICATE (ON STAMP PAPER)

| Го   |   |
|--|---|
| The Chief Executive Officer,<br>Amritsar Cantonment Board,<br>Amritsar 143001.   |   |
| Sub:   |   |
| Sir/Madam,   |   |
| While thanking you to allow me to occupy a portion of the above building acceptance of the completion certificate of the whole building for the plans under letter no. datedI hereby indemnify the Cantonment Amritsar against any risk damage and danger which may occur to occupants a of the said portion of building also undertake to take necessary security means their safety. We say that this undertaking will be binding on me/ us, cadministrators and to our assignees. | approved<br>Board of<br>and users<br>asures for |
| Yours faithfully,  |   |
| Witness OWNER/HOR/LESS   | EE  |

# **APPENDIX K**

# INDEMNITY BOND FOR BASEMENT (TO BE SUBMITTED BY APPLICANT)

# TO BE SUBMITTED ON NON-JUDICIAL STAMP PAPER OF RS. 10/- DULY ATTESTED BY THE OATH COMMISSIONER/MAGISTRATE FIRST CLASS

| Indemnity bond is executed by Shri  | s/o Shri   | R/o  |
|---|--|--|
| hereby called Applicant of plot no  |  |  |
| of Amritsar Cantonment in favor of  | the Competent  | Authority its  |
| successors or entitled.   |  |  |
| Whereas the Applicant have submitted the plan of basem Applicants have represented to the Competent Authority the construction of the said basement the Applicants shall Authority of any loss at time of digging of foundation of the course of construction of the basement or even thereafter  | and if sanction is g<br>Il indemnify the Cor<br>e said basement o  | ranted for<br>mpetent                                      |
| And whereas the said Applicants have further agreed to in Authority for any claims put up against the Authority either compensation or in any other way in case the Authority is amount to any person or the Applicant or Applicants of the Applicants hereby agree and undertake to indemnify the Applicant the Authority may require to pay to the extension.   | or by way of damag<br>required to pay ar<br>e adjoining propert<br>Authority to pay the                                  | e,<br>ny such<br>ies. The<br>e full extent                 |
| The Applicant further undertake and agree to indemnify the amount the Competent Authority may require to pay either damage or any other amount and further undertake to include and expenses that the Authority may require to defend surther Applicants undertake that no excavation shall be car boundaries of plot. Any damage occurring during or due to public sewer, water drains shall be made good by the Applicants. | er by way of compe<br>demnify the authoring<br>the action in any contributed<br>ried out beyond pe<br>to excavation made | ensation or<br>ty of all cost<br>ourt of law.<br>rmissible |
| In consideration of the above matter, undertaking and ind<br>Applicants the Authority hereunder in this behalf grant the<br>basement to the said Applicant.   |  |  |
| In witness hereof the Applicants abovementioned put the indemnity bond on this day of   | ir hands and seal to   | o the said   |
| Witness:  |  |  |
| (1)   | (Executant   |  |
| \ <del>-</del> /  | (Excoatant   | .~ <i>,</i>  |

### APPENDIX -L (SEE BYELAW NO. 22)

# QUALIFICATION OF LICENSED TECHNICAL PERSONNEL AND GUIDELINES FOR PREPARATION OF SCHEMES FOR BUILDING PERMISSION AND SUPERVISION

General Building/Development work for which permission is sought, shall be planned, designed and supervised by registered professionals. The registered professionals for carrying out the various activities shall be: Architect, Engineer, Structural engineer, Town planner, Landscape architect, Urban designer, Supervisor. Requirements of registration/license for these professionals by the Authority or by the body governing such profession and constituted under a statute, as applicable to practice within the local body's jurisdiction, are given in items 1 to 7 of the following table: (items 8-10 Plumber, Electrician and Fire Consultant may not need registration)

| Sr. No. | Professional | Qualification  | Competence/Function  |
|---------|--------------|--|--|
| 1.      | Architect    | Registered with valid membership of the Council of Architecture, India as prescribed under Architect's Act 1972.             | The registered Architect shall be competent to carry out the work related to the building/development permit as given below: a. Prepare and sign all plans, sub-division/layout plans and information connected with building permit except engineering services of multi-storeyed/ special buildings. b. Preparation of building plans, drawings and related information connected with development permit of area up to 1 hectare for metro-cities and 2 hectare for other places. c. Issuing certificate of supervision for development permit of area up to 1 hectare for metro-cities and 2 hectare for other places. (related to building layout and other architectural aspects) d. Issuing certificate of supervision and completion of all buildings pertaining to architectural aspects. |
| 2.      | Engineer     | Graduate in Civil Engineering from recognized Indian or foreign university.  Registered with valid membership (Civil) of the | The registered engineer shall be competent to carry out the work related to the building/development permit as given below: a. Prepare and sign all building plans, structural drawings and service plans and information connected with building permit; b. Preparation of structural drawings, details and calculations of buildings on  |

|    |                     | Institution of Engineers, India  | plot up to 500 m2 and up to 5 storeys or 16 m in height, all service plans and related information connected with development permit of area up to 1 hectare for metro-cities and 2 hectare for other places. c. Issuing certificate of supervision for development permit of area up to 1 hectare and 2 hectare for other places (pertaining to building layout, Building structure, civil works and service installations); d. Issuing certificate of supervision and completion of all buildings pertaining including structure and building services. |
|----|---------------------|--|---|
| 3. | Structural Engineer | Graduate in Civil engineering from recognized Indian or foreign university, or Corporate Member (Civil) of Institution of Engineers (India), minimum 3 years experience in structural engineering practice with designing and field work.  NOTE — The 3 years experience shall be relaxed to 2 years in the case of post-graduate degree of recognized Indian or foreign university in the branch of structural engineering. In case of doctorate in structural engineering, the | The registered engineer shall be competent to carry out the work to prepare the structural design, calculations and details for all buildings and undertake their supervision. In case of buildings having special structural features, as decided by the Authority, they shall be designed only by Structural engineers.   |

|    |                        | experience<br>required would be<br>one year.   |   |
|----|------------------------|--|---|
| 4. | Town Planner           | Graduate or Post- graduate degree in Town and country planning with valid Associate Membership of the Institute of Town Planners, India. | than 1 Hectare b. Issuing of certificate of supervision for development of land of all areas.   |
|    |                        |  | NOTE — However, for land layouts for development permit above 5 hectare in area, landscape architect shall also be associated, and for land development infrastructural services for roads, water supplies, sewerage/drainage, electrification, etc, the registered engineers for utility services shall be associated. |
| 5. | Landscape<br>Architect | Bachelor or Master's degree in landscape architecture or equivalent from recognized Indian or foreign university                         | The registered landscape architect shall be competent to carry out the work related to landscape design for building/development permit for land areas 5 hectares and above. In case of metro-cities, this limit of land area shall be 2 hectares and above.  |
|    |                        |  | NOTE — For smaller areas below the limits indicated above, association of landscape architect may also be considered from the point of view of desired landscape development.   |
| 6. | Urban Designer         | Master's degree in Urban Design or equivalent from recognized Indian or foreign university.  | The registered urban designer shall be competent to carry out the work related to urban design for city areas more than 5 hectares and campus area more than 2 hectares. He/She shall also be competent to carry out the work of urban renewal for all blighted/congested areas.  |
|    |                        |  | NOTE — For smaller areas below the  |

|     |                 |  | limits indicated above, association of urban designer may be considered from the point of view of desired urban design.  |
|-----|-----------------|--|--|
| 7.  | Supervisor      | Diploma in Civil engineering / Architectural Assistantship from recognized institute with 2yrs working experience or Civil Draftsmanship from I.T.I with 5yrs experience under a qualified Architect / Civil Engineer for building construction and supervision  | The registered supervisor shall be competent to carry out the work related to the building permit as given below: a. All plans and related information connected with building permit for residential buildings on plot up to 100 m2 and up to two storeys or 7.5 m in height; and b. Issuing certificate of supervision for buildings as per (a). |
| 8.  | Plumber         | licensed by the concerned Authority through examination of candidates-Certificate of training from ITI, with min. 2yrs experience of execution of sanitary and plumbing works under any govt. Dept./ Local body or a qualified Architect / Engineer. Knowledge of working drawings and dimensioned sketches. | The registered plumber shall be competent to do the following jobs:  • Execution/Supervision of Sanitary works upto 500 sqmtrs plot and 4 storeyed building.   |
| 9.  | Electrician     |  | le concerned electricity company   |
| 10. | Fire consultant |  | hief Fire Officer, Town/City Fire Service.   |

#### LICENSING

Fees for Licensing – The annual licensing fees shall be Rs. 2000/- p.a. & deposit Rs. 3000/- or as approved by the Board from time to time.

Provided that a registered Architect shall not be required to pay the licensing fee as above.

Duties and Responsibilities of Licensed Technical personnel – The duties and responsibilities of licensed technical personnel shall be as follows:

- 1. It will be incumbent on every licensed Technical personnel, in all matters in which he may be professionally consulted or engaged, to assist and co-operate with the Chief Executive Officer of Amritsar in carrying out and enforcing the provisions of the Building Byelaws and the Cantonments Act, 2006 including amendments issued from time to time.
- Every licensed Technical Personnel shall in every case in which he may be professionally consulted or engaged, be responsible, so far as his professional, connection with such case extends, for due compliance with the provisions of these Building Byelaws and the Cantonments Act, 2006 or such of them as may respectively be applicable to the circumstances of the particular case and in particular case and in particular it will be obligatory on him to satisfy himself that a qualified and competent Maistry or Inspector of Works in constantly employed and present on the work to supervise the execution of all work and to prevent the use of any defective material therein and the improper execution of any such work
- 3. In every case in which a Licensed Technical Personnel is professionally concerned in with any building or work upon any premises in respect of which a right to require a set back has accrued or is about to accrue to the Chief Executive Officer under the provisions of these Building Byelaws it will be incumbent on such Licensed Technical Personnel to ascertain whether "the regulate line of the street has been prescribed under the road widening programme of the Board and whether any portion of the said premises is required for the street and no Licensed Technical Personnel must, on any account or under any pretence whatever, be a part to any evasion or attempted evasion of the set back (if any that may be required.)
- 4. In every case in which a Licensed Technical Personnel is professionally convened in connection with any building or work upon any premises designed or intended to be used for any purposes in respect of which the written permission or license of the Chief Executive Officer, is prescribed by the said at a necessary condition to establishment or use of such premises for such purpose, it shall be incumbent on such Licensed Technical personnel, so far as

his professional connection with such case extends, to see that all conditions prescribed by the said Act, or by any rule for the time being in force there under, in respect of premises designed or intended to be applied to such use, are duly fulfilled or provided for .

5. When a Licensed Technical Personnel ceases to be in the employment for the development work, he shall report the fact forthwith to the Chief Executive Officer.

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### **APPENDIX 'M'**

### (SEE BYE LAW NO. 26)

# FLOOR AREA RATIO, OPEN SPACE AND HEIGHT LIMITATIONS IN CIVIL AREA AND AREAS OUTSIDE THE CIVIL AREA

#### 1. FLOOR AREA RATIO

**a.** For residential plots with plotted housing the maximum covered area FAR and number of dwelling units per residential plot shall be us under:-

| Sr. | Area of plot in Sq  | Maximum ground | FAR | Dwelling units |
|-----|---------------------|----------------|-----|----------------|
| No. | mtrs                | coverage as %  |     | per plot       |
| 1.  | Upto 175 Sqmtrs     | 90             | 350 | 03             |
| 2.  | 175 to 300 sqmtrs   | 90             | 300 | 04             |
| 3.  | 300 to 750 sqmtrs   | 75             | 225 | 06             |
| 4.  | 750 to 1000 sqmtrs  | 50             | 150 | 09             |
| 5.  | 1000 to 1500 sqmtrs | 40             | 120 | 09             |
| 6.  | 1500 to 2250 sqmtrs | 40             | 120 | 12             |
| 7.  | 2250 to 3000 sqmtrs | 40             | 120 | 15             |
| 8.  | 3000 to 3750 sqmtrs | 40             | 120 | 18             |
| 9.  | Above 3750          | 40             | 120 | 21             |

The total coverage and FAR permissible in any plot in a category, shall not be less than that permissible and available to the largest plot in the next lower category.

The Cantonment Board shall be competent to disregard variation of upto 5% in plot size, arising from conversion from square yard to square metre and to grant the norms applicable to the lower category of plot as per Table given above.

Mezzanine if constructed shall be included in FAR.

Basement shall not be counted towards FAR if used for purpose permissible as per Byelaw no 40.0. Basement area shall not extend beyond the coverage on the ground floor as per permissible and sanctioned built up area, but may extend to the area below the internal courtyard and shaft.

In bungalow areas FAR and ground coverage should not exceed 50% for all plot sizes. The FAR and ground coverage provided in table given above shall not be applicable to bungalow areas.

No construction would be permitted on plots of less than 25 Sqmt. Wherever there is existing structure/ building that is either of size less than prescribed 25 Sqmt. or where the existing structure/ building exceeds ground coverage and

FAR provided in table given above in these bye laws, shall be permitted as per existing plot size and/or approval granted to the original structure prior to coming into the effect the present building bye laws (applicable for redevelopments in plots that are developed through higher coverage and FAR).

Offices or commercial establishments provided it is air-conditioned. The area of such spaces shall be counted in FAR calculations.

Encroachment on public land shall not be regularized and shall be removed before the local body grants sanction for regularization of additional construction or height.

Projections/chajjas/covered chajjas/ built-up portions existing as on notification of these bye-laws above 3 metre height in the case of plots up to 175 square metres shall be regularized subject to the Applicant/Occupier obtaining a Structural Safety Certificate and Fire Clearance from the Competent Authority within a time frame as notified by the Board. Such projections/built-up portions thereon shall be counted in FAR and in the case of excess FAR over and above permissible FAR, such FAR in excess shall be regularized subject to payment of all applicable betterment and other charges imposed by the Competent Authority at the time of regularization.

The following shall not be included in covered area and FAR calculation:

- (a) A basement under a building used as parking space and for air conditioning plant room, other building services and storage as defined at Bye laws No. 40.
- (b) Area under stilts at the ground floor used as parking space.
- (c) Electrical cabin or a substation, watchman's booth width of maximum size of 1.5 metre with minimum width or diameter of 1.2 metres, pump house, garbage shaft, and space required for location of fire hydrants, electrical fittings and water tank.
- (e) Projections as specifically exempted under the byelaws.
- (f) Staircase mumty, chimneys and area under water-tanks of dimensions as permissible under these bye-laws.
- (g) The lift machine room. The lift shaft provided shall be included only once for FAR and ground coverage calculations.
- (h) Rockery, plant nursery, water pool, swimming pool (if uncovered) platform round a tree, tank, fountain bench, pavilion with open top and unenclosed side by walls, ramps, compound wall, gate, slide swing, overhead water tank on top of buildings;

### **Exception to ground coverage and FAR:**

The following exemptions may be sanctioned

- (a) Horizontal projections of 0.75 metres.
- (b) A canopy not exceeding 5 metres in length and 2.5 metres in width in the form of cantilever and unenclosed over the main entrance providing there is a minimum clear height of 2.1 metres below the canopy. The canopy shall not be accessible from the floor above for its use as a sit out place. There shall be minimum clearance of 1.5 metres between the plot boundaries and canopy. In single storied residential buildings, only one such canopy shall be sanctioned for such individual detached blocks. In more than one storied buildings, two canopies shall be Sanctioned one over the ground floor entrance and the other over the entrance to higher floor/s.
- (c) In residential buildings a balcony or balconies at roof level above first floor (including stilt floor) of a width of 1.0 metres from building line to the outer most line of balcony over hanging setbacks within one's own land and courtyard or extending beyond boundary line as approved by the competent authority on payment of penal charges as decided from time to time for its regularization. The total length of such balconies shall not be more than 1/3 of the total external; length of the building length.

#### 2. OPEN SPACES-

- a. The set-back, open spaces and side margins for sites in the Civil Area and outside Civil Area shall be as per Bye Law No. 26 and Table No.2.
- b. The maximum permissible ground coverage area in respect of plots of following sizes shall be –

2001 sq.m. to 3000 sq.m 45%

3001 sq.m. to 4000 sq.m 40%

4001 sq.m and above 33.33%

- c. The side marginal set-backs for plot sizes below 100 sq.m. whether situated in civil area or outside civil area, will be decided by the CEO considering the location, road widening programme of the Cantonment Board etc and in any case frontal set-back (facing a road / street) as prescribed in Table No. 2.
- d. The coverage area will be subject to the terms and conditions of Old Grant & Lease.
- 3. **NUMBER OF STOREYS** The maximum number of storey's permissible shall be ground floors in the Cantonment in order to facilitate consumption of existing Authorized Floor Space sanctioned prior to the imposition of FAR restrictions in Amritsar Cantonment i.e. prior to 30.09.1984.
- **4. PARKING** Parking floor can be on any floor in a building but there shall be no stilt plus another floor for parking. Basement(s) for parking plus parking floor shall be allowed and there shall be single basement only.

#### 5. HEIGHT LIMITATIONS-

- a. The height of the buildings will be restricted to 18.0 meters only.
- b. The height of stilt floor shall not be counted in the total height of the building, provided it is open from all sides and used only for parking.
- c. The maximum height of any floor shall not exceed 4.2 mtrs for commercial purposes with 50 % loft of maximum height of 1.6 mtrs and the height for residential purposes shall not exceed 4.2 mtrs. However, the heights for other categories of buildings shall be as prescribed in Byelaw No. 33.
- d. The height of old buildings, which is as per plan sanctioned prior to 30.09.1984 will be taken into account by the CEO / Board, whenever such building plan will be submitted for reconstruction.

# 6. PROVISION OF PLAYGROUNDS / ASSEMBLY TO BE COMPULSORILY FOLLOWED BY EDUCATIONAL INSTITUTIONS

The provision for playground and assembly shall be made compulsorily as per the regulations stipulated by the Competent Authority. The permissible FAR shall be calculated after excluding the area required to be utilized for playground / Assembly from the total area calculations.

\*\*\*\*\*\*

# PROFORMA – 1

# (SEE BYELAW NO. 7)

# ( AT RIGHT HAND TOP CORNERS OF SITE/BUILDING PLAN AT FLOOR LEVEL)

| Α. | AREA STATEMENT                                       | SQ.M                    |
|----|--|-------------------------|
| 1. | AREA OF PLOT   |                         |
| 2. | (a) DEDUCTIONS FOR ROAD<br>ACQUITION AREA            |                         |
|    | (b) PROPOSED ROAD                                    |                         |
|    | (c) ANY RESERVATION                                  |                         |
|    | TOTAL (a + b + c)                                    |                         |
| 3. | NET GROSS AREA OF PLOT (1-2)                         |                         |
| 4. | DEDUCTIONS FOR                                       |                         |
|    | (a) RECREATION GROUND AS PER BYELAW                  |                         |
|    | (b) INTERNAL ROADS                                   |                         |
|    | TOTAL (a + b)  |                         |
| 5. | NET AREA OF PLOT (3-4)                               |                         |
| 6. | ADDITIONS FOR F.A.R. TOTAL BUILT UP AREA PURPOSE FOR | 2 (a)<br>2 (b)<br>2 (c) |

| 7.  | TOTAL AREA (5 + 6)                |   |
|-----|-----------------------------------|---|
| 8.  | F.A.R. PERMISSIBLE                |   |
| 9.  | PERMISSIBLE FLOOR<br>AREA (7 x 8) | PERMISSIBLE TOTAL<br>FLOOR AREA ( 7 x 8 ) |
| 10. | EXISTING FLOOR AREA               | EXISTING FLOOR AREA                       |
|     |                                   |   |

| A.              | AREA STATEMENT   |               | SQ.M |  |
|-----------------|--|---------------|------|--|
| 11.             | PROPOSED AREA  | PROPOSED AREA |      |  |
| 12.0            | EXCESS BALCONY AREA<br>TAKEN IN F.A.R. (AS<br>PER B (c) BELOW) |               |      |  |
| 13.             | TOTAL BUILT UP AREA<br>PROPOSED (10+11+12)                     |               |      |  |
| <del>14</del> . | F.A.R. CONSUMED (13/7)   |               |      |  |
| В.              | BALCONY AREA STATEMENT   |               |      |  |
|                 | (a) PERMISSIBLE BALCONY AR<br>PER FLOOR                        | EA            |      |  |
|                 | (b) PROPOSED BALCONY AREA<br>PER FLOOR                         |               |      |  |
|                 | ( c) EXCESS BALCONY AREA (                                     | TOTAL)        |      |  |
| <u>C</u> .      | TENEMENT STATEMENT   |               |      |  |
|                 | (a) NET AREA OF PLOT OPEN (7) ABOVE                            |               |      |  |
|                 | (b) LESS DEDUCTION OF NON<br>RESIDENTIAL AREA (SHOPS ETC.)     |               |      |  |
|                 | (c) AREA OF TENEMENTS (a-c)                                    |               |      |  |
| _               | (d) TENEMENTS PERMISSIBLE                                      |               |      |  |

| PARKING STATEMENTS               |  |  |
|----------------------------------|--|--|
| OOTER/MOTORCYCLE<br>LE<br>SIDERS |  |  |
|                                  |  |  |
| SQ.M                             |  |  |
| OTER/MOTORCYCLE                  |  |  |
| OTER/MOTORCYCLE<br>LE OUTSIDERS  |  |  |
|                                  |  |  |
|                                  |  |  |
|                                  |  |  |

# **CERTIFICATE OF AREA**

Certified that the plot under reference was surveyed by me and

the dimensions of sides etc. of plot stated on plan are as measured on site and the area so marked out tallies with the area stated in General Land Register.

Signature of Architect. Engineer/Structural Engineer/ Supervisor

# PROFORMA – 2

(SEE BYE-LAW NO. 8)

| FORM FOR CERTIFICATE FOR STRUCTURAL DESIGN SUFFICIENCY                              |   |   |  |  |  |
|---|---|---|--|--|--|
| _   |   |   |  |  |  |
| the building / Amritsar Canto building submitt situations includ (structural design | house no or<br>nment we certify that<br>ted for approval satisfy<br>ding natural disasters a<br>gn) of the National Bu<br>information given there | n / re-erection / or of making alterations in Road / Street in the structural plans and details of the the structural safety requirement for all applicable, as stipulated under Para 6 ilding Code of India and other relevante in is factually correct to the best of our |  |  |  |
|   | Signature of owner  | Signature of the  |  |  |  |
|   | with date   | Registered Engineer / Structural Engineer with date and Registration No.  |  |  |  |
| Name :  |   | _   |  |  |  |
|   |   |   |  |  |  |
| Address :   |   | _   |  |  |  |
|   |   |   |  |  |  |