## The Orissa



## EXTRAORDINARY PUBLISHED BY AUTHORITY

No. 2309, CUTTACK, THURSDAY, DECEMBER 18, 2008/MARGASIRA 27, 1930

## **NOTIFICATION**

No. 11199/BP/BDA, the Bhubaneswar, Dated 15th December 2008

Whereas the draft of the Bhubaneswar Development Authority (Planning and Building Standards) Regulations, 2008 was published as required by sub-section (2) of. Section 125 of the Orissa Development Authorities Act ,1982(Orissa Act 14 of 1982) in the extraordinary issue No.727 of the Orissa Gazettee, dated the 7<sup>th</sup> April 2008 under the notification of the Bhubaneswar Development Authority,Bhubaneswar, dated the 27<sup>th</sup> March,2008 as No.2902-BDA, inviting objections and suggestions from all persons likely to be affected thereby till the expiry of the period of fifteen days from the date of publication of the said notification in the Orissa Gazette;

And whereas objections and suggestions received in respect of the said draft have duly been considered by the Bhubaneswar Development Authority before the expiry of the period so specified;

Now, therefore, in exercise of the powers conferred by section 124 of the said Act, the Bhubaneswar Development Authority, with the pervious approval of the State Government makes the following regulations namely the Bhubaneswar Development Authority (Planning and Building Standards) Regulations – 2008.

# BHUBANESWAR DEVELOPMENT AUTHORITY (PLANNING & BUILDING STANDARDS) REGULATIONS - 2008

#### PART – I

#### **DEFINITIONS**

## Short title, Extent and commencement

- **1.** (1) These regulations may be called the Bhubaneswar Development Authority (Planning and Building Standards) Regulations, 2008.
- (2) **They** shall extend to the whole area within the jurisdiction of the Bhubaneswar Development Authority.
- (3) They shall come into force on the date of their publication in the Orissa Gazette.

## **Definitions**

- **2.** (I) In these regulations, unless the context otherwise requires:
  - (1) "Act" means the Orissa Development Authorities Act, 1982.(Act 14 of 1982)
  - (2) "Advertising Sign" means any surface or structure with characters, letters or illustrations applied there to and displayed in any manner whatsoever outdoors for the purpose of advertising or giving information or to attract the public to any place, person, public performance, article, or merchandise, and which surface or structure is attached to, forms part of, or is connected with any building, or is fixed to the ground or to any pole, screen, fence or hoarding or displayed in space, or in or over any water body included in the jurisdiction of the Authority.
  - (3) "Agricultural use" means use of land for the purpose of agriculture, horticulture, sericulture, animal husbandry, poultry farming, plant nursery, piggery, dairy farming, vegetable farming and any activity related to agriculture or milk chilling plant;
  - (4) "Air-Conditioning" means the process of treating air so as to control simultaneously its temperature, humidity, cleanliness and distribution to meet the requirement of conditioned space;
  - (5) "Air Port Reference Point" means a designated point which is established in the horizontal plane at or near the geometric center of the landing area.
  - (6) "Amenity" means roads, street, open spaces, parks, recreational grounds, play grounds, gardens, water supply, electric supply, street lighting, sewerage, drainage, public works and other utilities, services and conveniences.

- (7) "Annexure" means an Annexure appended to these regulation's
- (8) "Apartment or flat" means a dwelling unit in building.
- (9) "Apartment building" means a building having six or more dwelling units.
- (10) "Approved" means approved by the Authority.
- (11) "Addition/ Alteration" means structural change, such as addition to the covered area or height or the removal of part of a building or construction or cutting into or removal of any wall, partition, column, beam, joist, floor or other support, or a change to the fixture of equipment of the building.
- (12) "Applicant" means the person who has title to a land or building and includes,
  - A. an agent or trustee who receives rent on behalf of the owner;
  - B. an agent or trustee who receives rent or is entrusted with or is concerned with any building devoted to religious or charitable purpose.
  - C. a receiver, executor or administrator or a manager appointed by any Court of competent jurisdiction to have the charge of or to exercise the rights of the owner; and
  - D. a mortgagee in possession.
- (13) "Art Commission" means the Commission constituted under subsection (1) of section 88; of the ODA Act, 1982.
- (14) "Authority" means the Bhubaneswar Development Authority and does not include its employees acting individually. The powers and responsibilities of the Authority under this regulation can not be delegated, unless specifically provided for in this regulation, the Act, the rules or unless notified by the Government;
- (15) **"Balcony"** means a projection to serve as passage or sit out place including a hand rail or balustrade.
- (16) **"Barsati"** means a habitable room, not exceeding 30% of the covered area on the top floor of the building with toilet & kitchen unit built contiguously.
- (17) **"Basement or cellar"** means lower storey of a building ,below or partly below the ground level;
- (18) "Basti Area" means an area declared as such under a Development Plan and in the absence of such declaration, any area comprising old

settlements covering such extent of lands as may be determined by the Authority in consultation with the concerned Local Body;

- (19) **"Basti Plot"** means a plot having a width ranging between 4.0 m. and 6.3 m., the depth being more than three times the width, and located in a basti area:
- (20) "Builder" means an applicant, land owner, contractor, holder of power of attorney of the land owner, partnership, trust or company which has responsibility for construction, leasing, selling or disposing otherwise of a building for residential and other purposes and duly registered by the Authority.

**NOTE:** The Bhubaneswar Development Authority happens to be the builder for its own construction.

- (21) **"Building"** means any structure or erection or part of a structure or erection which is intended to be used for residential, commercial, industrial or any other purpose whether in actual use or not, and in particular.
  - A. "Assembly Building" refers to a building or part of a building where group of people congregate or gather for amusement, recreation, social, religious, patriotic and similar purposes and includes theaters, assembly halls, auditoria, exhibition halls, museum, skating rinks, gymnasium, dance hall, club rooms recreation piers and stadia.
  - B. "Commercial Building" refers to a building or part of a building, which is used for transaction of business, keeping of accounts and records or for similar purposes and includes Banks and Commercial Offices and Corporate offices. It shall include mercantile buildings like shops, stores, market display and sale of merchandise either in wholesale or retail, or offices, storage or services facilities incidental to the sale of merchandise and includes Cinema Halls, Petrol Pumps, Hotels, Restaurants, Clinics, Pathology Labs, Nursing Homes, Lodge-cum-guest houses & Dharma Kantas, etc.
  - C. "Educational Building" refers to a building used for school, college or daycare purpose for more than 8 hours per week involving assembly, instructions, education or recreation.
  - D. "Form" means a Form appended to these regulation.
  - E. "Hazardous Building" refers to a 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 are liable to burn with extreme rapidity and/or producing poisonous fumes, or the storage, handling, manufacturing or processing of which involves highly corrosive,

toxic, obnoxious alkalis, acids or other liquids, gases or chemicals, producing flame, fumes and explosion, poisonous irritant or corrosive gasses and for the storage, handling or processing of any material producing explosive mixture of dust or which result in the division of matter into fine particles subject to spontaneous ignition. This shall include petrol filling stations.

- F. "Industrial BuilBding" refers to a building or part of a building in which products or materials of all kind and properties are fabricated, assembled or processed such as assembly plants, laboratories, power plants, smoke houses, refineries, gas plants, mills, dairies or factories.
- G. "Institutional Building" refers to a building or part of a building which is used for purposes such as Research and Training Centre, Public/Semi Public offices, Hospitals, Dispensaries and Health Centers.
- H. **Residential Building**" refers to a building in which sleeping accommodation is provided for normal residential purpose with or without cooking or dining or both facilities and includes one or two or multi-family dwelling dormitories, apartment houses, flats and hostels.
- I. "Public Utility Building" means and includes Post Office, Police Station, Fire Station, Hospital, Dispensary, and Telephone Exchange, sub-station, water works, Taxi Stands, Bus Terminals, etc.
- J. "Storage Building" refers to a building or part of building used primarily for the storage or sheltering of goods, storehouses, hangers, terminal depot, grain elevators, barn or stables.
- K. "Multi Level Car Parking Building" means a building partly below ground level having two or more basements or above ground level, primarily to be used for parking of cars, scooters or any other type of light motorized vehicles.
- (22) "Building Accessory" means a subordinate building, use of which is incidental to that of a principal building, on the same plot such as garage, coal or fuel shed, peons, chowkidars, or domestic servants quarters, etc;
- (23) "Building Height" means the vertical distance measured in the case of flat roofs, from the average level of the center line of the adjoining street to the highest point of the building adjacent to the street; and in the case of pitched roofs, up to the point where the external surface of the outer wall intersects the finished surface of the sloping roof and in the case of gables facing the road, the mid-point between the eaves level and the ridges.

Explanation – 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.

- (24) "Building line" means the line up to which the plinth of a building adjoining a street or an extension of a street or on a future street may lawfully extend and includes the lines prescribed in any development plan in operation for any area under the jurisdiction of the Authority or specification indicated in any Town Planning or Development Scheme, or in these Regulations.
- (25) "Canopy" means cantilevered projection at lintel level over any entrance.
- (26) "Cornice" means a sloping or horizontal structural overhang usually provided over openings or external walls to provide protection from sun and rain.
- (27) "Chajja"/"Sun-Shade" means a sloping or horizontal structural overhang, usually provided for protection from sun and rain or for architectural considerations at lintel level.
- (28) "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 any heat producing appliance or equipment employing solid, liquid or gaseous fuel;
- (29) "Combustible materials" means a material, which burns or adds to a fire when used for combustibility in accordance with good practice;
- (30) "Conversion" means the change of occupancy to another occupancy or change in building structure or part thereof resulting in change of space or use requiring additional occupancy certificate.
- (31) "Corner plot" means a plot at the junctions of and fronting on two or more intersecting streets. Corner plot" means a plot facing two streets, the frontage would be on the street having larger width. In cases, where the two streets are of same width, then the larger side of the plot will decide the frontage. In such case, the location of a garage (on a corner plot) if provided, within the open space shall be located diagonally opposite the point intersection.
- (32) "Courtyard" means a space permanently open to sky, with or without pergola, enclosed fully or partially by buildings and may be at ground level or any other level within a building;
- (33) "Covered Area" means in respect of ground floor, area covered immediately above the plinth level by the building but does not include the open space covered by

- A. garden, rockery, well and well-structures, rainwater harvesting structures, plant nursery, water-pool (if uncovered), platform round a tree, tank, fountain, bench, chabutara with open top unenclosed on sides by walls, boundary wall, swing, and area covered by chhajja without any pillars etc, touching the ground;
- B. 'drainage culvert conduit', catch-pit, gully pit, inspection chamber, gutter and the like; and
- C. compound wall, gate, slide/ swing door, canopy, and areas covered by chajja or similar projections and staircases which are uncovered and open at least on three sides and also open to sky.
- D. Watchmen booth, pump house, garbage shaft, electric cabin or substations, and such other utility structure meant for the services of the building under construction.
- (34) "Cul-de-sac" means such means of access having length up to 150 m. with an additional turning space not less than 81 square meters in area having no dimension less than 9 m.;
- (35) "Damp-Proof Course" means course consisting of some appropriate water proofing material provided to prevent penetration of dampness.
- (36) "Detached building" means a building whose walls and roof are independent of any other building with open spaces on all sides;
- (37) "Development Plan/ Comprehensive Development Plan" includes any development plan either interim or comprehensive or zonal plan in operation for the area under the jurisdiction of the Authority;
- (38) "**Deviation**" means any construction made in departure from the approved plan by way of alterations or additions, modifications in the total floor area, coverage, floor area ratio (FAR), setbacks, height, parking space, provision of public utilities etc.
- (39) "**Drain**" means a line of pipes including all fittings and equipment such as manholes, inspection chamber, traps, gullies and floor traps, used for the drainage of a building or a number of buildings, or yards appurtenant to the buildings within the same cartilage and includes open channels used for conveying surface water;
- (40) **"Drainage"** means the removal of any liquid by a system constructed for purpose;
- (41) **"Dwelling Unit"** means a building used for living purpose and includes a garage, a servant quarter or a guardroom.

- (42) "EWS House" means a house or dwelling unit intended for Economically Weaker Sections with maximum built up area of 32 sq.mtr.
- (43) "EWS Plot" means a residential plot intended for Economically Weaker Sections having maximum plot area of 48 sq.mtr.
- (44) **"Encroachment"** means an act to enter into the possession or rights either of permanent or temporary nature on a land or builtup property of local body or state/ central Government.
- (45) **"Existing Use"** Use of a building or structure existing authorisedly with the approval of the Authority before the commencement of these Regulations.
- (46) **"Enclosed stair-case"** means a stair-case, separated by fire resistant walls from the rest of the building.
- (47) **"Existing Building or use"** means a building, structure or its use as sanctioned/ approved/ regularized by the Competent Authority, existing before the commencement of these Regulations;
- (48) **"Exit"** means a passage, channel or means of egress from any building, storey or floor area to a street or other open space of safety;
- (49) **"External Wall"** means an outer wall of a building even though adjoining to a wall of another building and also means a wall abutting on an interior open space of a building.
- (50) **"Farm House"** means a plot of land including construction thereon in the area designated for agricultural use by the Authority.
- (51) **"Farm Shed"** shall include permanent or temporary structures erected in the plot used for farmhouse.
- (52) **"Fire Alarm System"** means an arrangement of call joints or detectors, sounders and other equipments for the transmission and indication of alarm and sometimes used as signals for testing of circuits and whenever required for the operation of auxiliary services. This device may be work automatically or manually to alert the occupants in the event of fire;
- (53) **"Fire Lift"** means lift specially designed for use by fire service personnel in the event of fire;
- (54) **"Fire Proof Door"** means a door or shutter fitted to a wall opening, and constructed and erected with the requirement to check the transmission of heat and fire for a specified period;
- (55) "Fire Resisting Material" means the material, which is normally used for fire resistance.

- (56) **"Floor"** means the lower surface in a storey on which one normally walks in a building.
- (57) **"Floor Area Ratio (FAR)"** means the quotient obtained by dividing the total covered area on all floors with the area of the plot.
- (58) **"Footing"** means the part of a structure, which is in direct contact with the ground and transmitting loads to the ground.
- (59) **"Foundation"** means that part of a structure, which is in direct contact with and meant for transmitting loads to the ground.
- (60) "Gallery" means an intermediate floor or platform projecting from a wall of an auditorium or a hall providing extra floor area, additional seating accommodation, etc. It shall also include structures provided for seating in stadia.
- (61) "Garage-Private" means a building or a portion thereof designed for parking of privately owned motor vehicles or any other vehicles.
- (62) "Garage-Public" means a building or a portion thereof designed or used for repairing, servicing, hiring, selling or parking of motor driven or any other vehicles.
- (63) **"Ground Floor"** shall mean storey, which has its floor surface nearest to the ground around the building.
- (64) "Group Housing" means premises comprising an area of 4000 sq.mtr or more and the land is owned by Co-operative Group Housing Society and the construction is undertaken by single agency.
- (65) "Habitable room" means a room having area of not less than 9.0 sq. m., width 2.4 m.(min.), height 2.75 m.(min.) occupied or designed for occupancy by one or more persons for study, living, sleeping, eating, cooking if it is used as a living room, but does not include bathrooms, water closet compartments, laundries, serving and storage pantries, corridors, cellars, attics and spaces that are not used frequently or during extended periods;

## (66) "Hazardous material"

- A. Means radioactive substances:
- B. Material which is highly combustible or explosive and/or which may produce poisonous fumes explosive emanations, or storage, handling, processing or manufacturing of which may involve highly corrosive, toxic, obnoxious alkalis or acids or other liquids;
- C. Other liquids or chemicals producing flame, fumes, explosive, poisonous, irritant or corrosive gases or which may produce

- explosive mixtures of dust or fine particles capable of spontaneous ignition.
- (67) "Hazardous and obnoxious industry" means industry which creates nuisance to the surrounding development in the form of smell, smoke, gas, dust, air pollution, water pollution and other unhygienic conditions.
- (68) "Natural hazard prone areas" means areas likely to have moderate to high intensity earthquake, or cyclonic storm, or significant flood flow or inundation, or landslides/mud flows/avalanches, or one or more of these hazards.
- NOTE: Moderate to very high damage risk zones of earthquakes are shown in Seismic Zones III, IV and V specified in IS:1893; moderate to very high damage risk zones of cyclones are those areas along the sea coast of India prone to having wind velocities of 39 m/s or more as specified in IS:875(Part 3;) and flood prone areas in river plains (unprotected and protected) are indicated in the Flood Atlas of India prepared by the Central Water Commission, besides, other areas which can be flooded under conditions of heavy intensity rains, inundation in depressions, back flow in drains, inadequate drainage, etc. as identified through local surveys in the development plan of the area and landslide prone areas as identified by State Government/Land surveys.
- (69) "Heritage Zone" means the area as delineated in Comprehensive Development Plan.
- (70) "Illuminated Exit Signs" means a device for indicating the means of escape during normal circumstances and power failure.
- (71) **"Jhamp"** means a downward vertical or sloping projection hanging below the balcony to provide protection from direct sun or rain. "
- (72) **"Katra/ Chawl"** means a building so constructed as to be suitable for living in separate tenements each consisting a single room, or of two, but not more than two rooms and with common sanitary arrangements.
- (73) "Latrine-connected" means a latrine connected to the municipal sewer system;
- (74) "Latrine-unconnected" means a latrine not connected to the municipal sewer system; it may be connected to a septic tank or suitable treatment or disposal system;
- (75) "**Ledge / Tand**" means a shelf-like projection supported in any manner whatsoever, except by means of vertical supports within a room itself but not having projection wider than 1.0 meter and at a minimum clear height of 2.1 meters from the floor level;

- (76) "LIG House" means a house or dwelling unit intended for low income groups with a built up area of maximum 48 sq.mtr.
- (77) **"LIG Plot"** means a residential plot intended for low income groups with a plot area of maximum 60 sq.mtr.
- (78) "**Loft**" means an intermediate floor between two floors or a residual space in a pitched roof, above normal floor level with a maximum height of 1.5 meters and which is constructed or adopted for storage purposes;
- (79) "Licensed Technical Person" means Architect registered with the Council of Architecture or Civil Engineer/Structural Engineer/Town Planner/Supervisor licensed by the Authority.
- (80) "Masonry" means an assemblage of masonry units properly bonded together with mortar;
- (81) "Mezzanine Floor" means an intermediate floor between two floors, above ground level, accessible only from the lower floor;
- (82) "Multi Storey or High Rise Building" means a building whose height is 15 meters or more, measured from the average level of the centre line of the street on which the site abuts.
- (83) "Mumty or Stair Cover" means a structure with a covering roof over staircase and its landing built to enclose only the stairs for the purpose of providing protection from weather and not used for human habitation.
- (84) "Mitigation" means measures taken in advance of a disaster aimed at minimizing or eliminating its impact on society and on environment including preparedness and prevention.
- (85) "Non-Combustible Material" means a material, which does not burn nor add heat to a fire when tested for combustibility in accordance with good practice.
- (86) "Non -Conforming Use of a Building or Land" means the use of a building or land existing at the time of commencement of these Regulations, and which does not conform to the Regulations pertaining to the zone in which it is located.
- (87) "Occupancy or Use" means the principal occupancy for which a building or a part of a building is used or intended to be used;
- (88) "Open Space" means an area forming an integral part of the plot, left open to the sky;
- (89) "Owner" means a person, group of persons, a company, trust, Institute, Registered body, State or Central Government and its

- departments, undertakings and the like in whose name the property stands registered in revenue records.
- (90) **"Parapet"** means a low wall or railing built along the edge of a roof or a floor having a minimum height of 1.0 m
- (91) "Parking Space" means an area enclosed or unenclosed, covered or open, of sufficient size to park vehicles, together with a driveway connecting the parking space with a street or any public area and permitting ingress and egress of the vehicles;
- (92) "Partition" means an interior non-load bearing wall, one storey or part of a storey in height.
- **(93) "Performance Security"** means a security deposit to be deposited with the Authority by the Builder/ Developer of an Apartment Building/ Group Housing/ Commercial Building/Real Estate Development at the time of approval of Plans.

However, no Performance Security is required for a commercial building having a covered area of less than 300 sq.mtr.

- **(94)"Permit"** means a permission or authorization in writing by the Authority to carry out the work regulated by these Regulations.
- (95)"Plantation" means plantation of plants and trees.
- (96) "Plinth" means the portion of a structure between the surface of the surrounding ground and the surface floor, immediately above the ground.
- (97) "Plinth Area" means the built up area measured at the floor level of ground floor;
- (98)"Porch" means a covered surface supported on pillar or otherwise for the purpose of pedestrian or vehicular approach to a building.
- (99)"Public Utility service" means drainage, sewerage, electricity, water supply, solid waste disposal, sanitation, fire services, roads and any other support or infrastructure and the like for which a building has to depend on public bodies, authorities or agencies;
- (100)"Ramp" means a passage with gradual slope joining two level surfaces.
- (101) "Real Estate Development" means development undertaken for sale.
- (102)"**Registered Architect**" means an Architect registered with the Council of Architecture, who is not in arrears of subscription and who has not been the debarred by the Authority.
- $\begin{tabular}{ll} \begin{tabular}{ll} \beg$

- (104)"Road" means any access *viz*. highway, street, lane, pathway, alley, or bridge, whether a thoroughfare or not, over which the public have right of passage or access or have passed and had access uninterruptedly for a specified period and includes all bunds, channels, ditches, storm water drains, culverts, side tracks, traffic islands, road side trees and hedges, retaining walls, fences barriers and railings within the road line.
- (105)"Road Width or Width of Road/Street" means the whole extent of space within the boundaries of a road when applied to a new road/street as laid down in the city survey or development plan or prescribed road lines by any act of law and measured at right angles to the course or intended course of direction of such road.
- (106)"Row Housing" means a row of contiguous houses with only front, rear and interior open spaces.
- (107)"Room Height" means the vertical distance measured from the finished floor level to the finished ceiling.
- (108)"Rule" means the Orissa Development Authorities Rules, 1983.
- (109) "Schedule" means a Schedule appended to these regulations.
- (110) "Section" means section of the Act.
- (111) "Semi-Detached Building" means building detached on three sides (front, rear and side) with open spaces as specified under the Regulations.
- (112)"Set back" means the distance between the plinth lines of the building and the boundary of the plot.
- (113) "Setback line" means a line usually parallel to the plot boundaries and laid down in each case by the Authority beyond which nothing can be constructed towards the plot boundaries and shall not apply to slums taken up under an approved programme of the Government subject to the specific sanction of the Government., and subject to the conditions that there will not be more than 25 plots in one cluster, and the area of each plot in the cluster shall not exceed 25 sq. m.
- (114) "Settlement" means a human settlement, whether urban or rural in character. It includes habited villages, towns, townships, cities and the areas notified under the control of the Authority.
- (115) "Site" means a parcel or piece of land enclosed by definite boundaries.
- (116) "Site with Double Frontage" means a site having frontage on two streets other than corner plot.

- (117)"Service Floor" means floor in hotel or commercial building above ground floor in case of more than four storied buildings.
- (118)"Service Lane" means a lane provided at rear or side of a plot for service purposes.
- (119)"Service Road" means a road/lane provided at the front, rear or side of a plot for service purpose.
- (120)"Side Depth" means horizontal distance between the front and rear side boundaries.
- (121) "Smoke Stop Door" means a door for preventing or checking the spread of smoke from one area to another.
- (122) "Stilt floor" means a floor supported by pillars with all four sides open to be used for parking, switch room, generator room, society room & information room with minimum height of 2.4 meter.
- (123)"Storage Space" means a space where goods of non-hazardous nature are stored and includes cold storage and banking safe vaults.
- (124) "Store Room" means a room used as storage.
- (125)"Spiral Staircase" means a staircase forming continuous winding curve round a central point or axis provided in a open space having tread without risers.
- (126)"Storey" means the space between the surface of any floor and the surface of the floor next above it, or if there be no floor above it then the space between any floor and the ceiling next above it, but shall not include a mezzanine floor;
- (127)"Supervisor" means a person having Diploma in Architectural Assistantship/ Diploma in Civil Engineering/ equivalent qualification.
- (128) "Tenements" means room or rooms in the occupation of , or meant for the occupation of one tenement;
- (129)"To abut" means to abut on a road so that any portion of the building is on the road boundary;
- (130)"To erect" a building means:
  - A. to erect new building on any site whether previously built upon or not:
  - B. to re-erect any building of which portions above the plinth level have been pulled down or destroyed

- (131) "Unsafe Building" means buildings which are structurally and constructionally unsafe, or in-sanitary, or do not provide adequate means of egress, or which constitute fire hazard, or are otherwise dangerous to human life or property, or which in relation to existing use constitute a hazard to safety/health/public welfare by reason of inadequate maintenance, dilapidation or abandonment.
- (132) "Unauthorized Construction" means the erection or re-erection, addition or alternation which is not approved or sanctioned by the Authority.
- (133)"Underground/Overhead Tank" means an underground/ overhead water tank, constructed or placed to store water.
- (134) "Verandah" means space with at least one side open to the outside with the exception of one-meter parapet on the upper floors to be provided on the open side.
- (135)"Ventilation" means the supply of outside air into a building through window or other openings due to wind out side and convection effects arising from temperature, or vapour pressure differences (or both) between inside and outside of the building.
- (136)"Water Closet'/ W.C." means a privy with arrangement for flushing the pan with water but does not include a bath room;
- (137)"Watercourse" means a natural channel or an artificial channel formed by draining or diversion of a natural channel meant for carrying storm and wastewater.
- (138)"Window" means an opening to the outside other than a door, which provides all or part of the required light or ventilation, or both to an interior space.
- (139)"Zoning Regulations" means Regulations or Plans governing land use in any development plan or forming part of a development plan in operation;
- (2) Words and expressions used in these regulations, but not defined, shall have the same meaning as respectively assigned to them in the Act/Rules and the National Building Code of India, 2005 amended from time to time.

#### PART - II

#### **ADMINISTRATION**

## **Applicability**

- **3.** Subject to the provisions of the Act, these regulations shall apply:
  - (1) to the planning, design and construction of building in case of erection a building:
  - (2) to all parts of the building whether removed or not, and in case of removal of whole or any part of the building;
  - (3) to the remaining part of the building after demolition and work involved in demolition in case of demolition of whole or any part of a building;
  - (4) to the whole building whether existing or new building (except only to that part of the building, which is consistent with these Regulations) in case of alteration of a building;
  - (5) to all parts of the building affected by the change in case of change of occupancy of a building; and
  - (6) to use of any land or building where sub-division of land is undertaken or use of land or building is changed.

## Deemed permission

- **4.** (1) The construction of any building in respect of which permission has been issued before coming into force of these regulations, shall, so far as it is not inconsistent with the provisions of these regulations regarding provision of public utility services, and construction in heritage zone, continue to be validly made and the said permission shall be deemed to have been issued under the corresponding provisions of these regulations.
  - (2) Where any building has been constructed without an approved plan or with deviation of an approved plan, the provisions of these Regulations shall be insisted upon.

## Application

**5.** (1) Any person who intends to erect, re-erect or make additions or alterations in any building or demolish any building shall apply to the Authority in Form-I (Part-I). Based on this, the Authority may prescribe separate formats for different categories of buildings and group housing:

(2) Such application shall be accompanied by the following documents.

Four copies of plans either computer prints, plain paper copies or ammonia prints, duly signed by the persons who have prepared them and the owner / applicant, showing:

- i. **Key plan:** A key plan drawn to a scale of not less than 1:10,000 shall be submitted along with the application for development/building permit showing the boundary and location of the site with respect to neighborhood landmarks. The minimum dimension of the key plan shall be not less than 75 mm.
- ii. **Site plan:** The site plan with the application for permit shall be drawn to a scale of not less than 1:200 for site up to 1000 sq. mtr., 1: 500 for a site up to 1 hectare and 1:1000 for site more than 1 hectare and shall show;
  - a. the boundaries of the site and of any contiguous land;
  - b. the position of the site in relation to neighboring streets;
  - c. the name of the streets in which the building is proposed to be situated, if any;
  - d. all existing buildings standing on, over or under the site including service lines;
  - e. the position of the building and of all other buildings(if any) which the applicant intends to erect upon his contiguous land referred to in (a) in relation to;
    - 1) 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;
    - 2) all adjacent streets, buildings(with no. of storey and height) and premises within a distance of 15 m. of the site and of the contiguous land (if any) referred to in (a.); and
    - 3) if there is no street within a distance of 15 m. of the site, the nearest existing street
  - f. the means of access from the street to the building, and to all other buildings (if any) which the applicant intends to erect upon his contiguous land referred to in(a);
  - g. space to be left about the building to secure free circulation of air, admission of light and access for scavenging purposes;

- h. the width of the street (if any) in front and of the street (if any) at the side / rear or near the buildings;
- i. the direction of north point relative to the plan of the building;
- j. any physical features, such as well, drains, etc. and
- k. such other particular as may be specified by the Authority.
- **iii. Subdivision/ layout plan:** In case of development work, the notice shall be accompanied by the sub division/layout plan which shall be drawn on a scale or not less than 1:500 containing the following;
  - a. scale and north point;
  - b. the location of all proposed and existing roads with their existing /proposed/prescribed widths within the land;
  - c. dimensions of the plot along with building lines showing the setbacks with dimensions within each plot;
  - d. the location of drains, sewers, public facilities and services, and electrical lines etc.:
  - e. table indicating size, area and use of all the plots in the sub division/layout plan;
  - f. statement indicating the total area of the site, area utilized under roads, open spaces for parks, playgrounds, recreation space and development plan reservations, schools, shopping and other public spaces along with their percentage with reference to the total area of the site proposed to be subdivided; and
  - g. in case of plots which are subdivided in built up areas in addition to the above, the means of access to the subdivision from existing streets.
- **iv. Building Plan and details:** The plans of the buildings and elevations and sections accompanying the notice shall be drawn to a scale of 1:100. The plans and details shall;
  - a. include floor plans of all floors together with the covered area clearly indicating the size and spacing of all framing members and sizes of rooms and the position of staircases, ramps and lift wells:
  - b. show the use or occupancy of all parts of the buildings;
  - c. show exact location of essential services, for example, WC, sink, bath and the like;

- d. Include at least one elevation from the front showing height of building and rooms and also the height of parapet;
- e. Include at least one section through the staircase;
- f. Include the structural arrangements with appropriate sections showing type/arrangements of footings, foundations, basement walls; structural load bearing walls, columns and beams, and shear walls; and arrangement/spacing of framing members, floor slabs and roof slabs with the material used for the same:
- g. show all street elevations;
- h. give dimension of the projected portions beyond the permissible building line;
- i. include terrace plan indicating the drainage and slope of the roof; and
- j. give indications of the north point relative to the plan.
- k. statement and calculation sheets with regard to the plot area, floor wise details of spaces under various categories like apartments or office spaces, lobby circulation, staircase, lift, mezzanine, balconies and details of such area which are to be exempted from calculation of floor area ratio, and;
- v. Building Plan for Multi-storied/special buildings: For all multistoried buildings which are 15 m. or more in height and for special buildings like educational, assembly, institutional, industrial, storage and hazardous and mixed occupancies with any of the aforesaid occupancies having covered area more than 500 sq. m.

The following additional information shall be furnished/indicated in the building plan in addition to the items given in (iv) as applicable:

- Access to fire appliances/vehicles with details of vehicular turning circle and clear motorable access way around the buildings;
- b. Size(width) of main and alternative staircases along with balcony approach, corridor, ventilated lobby approach;
- c. 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 space;
- h. Refuse area, if any;
- i. Details of building services- Air-conditioning system with position of fire dampers, mechanical ventilation system, electrical services, boilers, gas pipes, etc;
- j. Detail of exits including provision of ramps, etc, for hospitals and special risk buildings/uses;
- k. Location of generator, transformer and switch gear room;
- 1. Smoke exhauster system, if any;
- m. Details of fire alarm system network;
- n. Location of centralized control, connecting all fire alarm systems built-in-fire protection arrangements and public address system, etc;
- Location and dimension of static water storage tank and pump room along with 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, drenchers, etc; and
- q. Location and details of first-aid fire fighting equipments/installations.
- r. longitudinal cross section of the building including size of footings, basement and super structure framing members and details of building and room heights and of staircase
- vi. Services plans: The services plan shall include all details of building and plumbing services, and also plans, elevations and sections of private water supply, sewage disposal system and rain water harvesting system.
- **vii. Land Scape Plan:** The land scape plan shall include the area to be developed as lawn, garden, plantation etc.
- **viii. Specifications:** Specifications, both general and detailed, giving type and grade of materials to be used duly signed by the registered architect, engineer, structural engineer shall accompany the notice.

## (3) Certificates/Clearances:

- (i) In case the applicant is a trust, group of persons, partnership or a company, a registered agreement between the holder of the right, title and interest and the applicant, valid under the Transfer of Properties Act, 1982 and Copies of the Agreement/ Article of Association/ Memorandum/ Byelaws.
- (ii) No Objection Certificate from the Orissa State Housing Board / Bhubaneswar Development Authority, for the additional constructions, in case the house is delivered by the Board / Authority.
- (iii) Necessary environmental clearance wherever applicable.
- (iv) For all buildings with a height of 15.0 meters and above, NOC from Fire Service shall be submitted.
- (v) NOC from Airport Authority of India shall be furnished where ever applicable.
- (vi) In case of building more than 30 meters height, the Structural plan and the structural design shall have to be vetted by any State Resource Centre identified by Orissa State Disaster Management Authority or any reputed technical institution identified by the Authority.
- (vii) Structural stability certificate in the prescribed Form-VII signed by the engineer /structural engineer and the owner jointly shall be furnished.
- (viii) Supervision certificate in Form-I (part-II) shall be furnished by the registered architect/ engineer/structural engineer/ supervisor/ town planner undertaking the supervision.
- (ix) A check list in Form-I (Part-III) shall be furnished by the empanelled/registered technical person.
- (4) Plans shall be shown as specified below. Where items of work are not identified, the coloring notation used shall be indexed.

TABLE-1: COLOURING NOTATION OF THE PLAN

Sl. No.	Item	Computer Plots / plain paper copies/ ammonia
		prints
1.	Plot lines	Thick Block
2.	Existing Street	Green
3.	Permissible building line	Thick Dotted Black
4.	Existing work (Outline)	Black
5.	Work Proposed to be	Yellow Hatched
	demolished	
6.	Proposed	
	(a) Additions and Alterations	Red filled in

	(b) Entirely New work	Not to be colored
7.	Drainage	Red Dotted
8.	Water Supply	Black Dotted Thin

#### Fees

- **6.** The Authority shall levy the following fees:
  - (1) Every application for permission for building operation or development shall be accompanied by a Scrutiny fee as specified in clause 18 of the ODA Rules, 1983.
  - (2) In the event of approval, the applicant shall deposit a sanction fee as decided by the Authority from time to time.
  - (3) Fees towards premium FAR as decided by the Authority from time to time.
  - (4) Fees for retention of structures for temporary period as decided by the Authority from time to time.
  - (5) Fees for change of occupancy as decided by the Authority from time to time.
  - (6) Fees for change of land use as decided by the Authority from time to time

## Security deposit

- 7. (1) The applicant shall deposit a refundable non earning security deposit at the rate of Rs.100/- per sq. m. of floor area for the following categories of buildings, namely:
  - A. Group housing / apartment buildings
  - B. Commercial buildings having 300 sq.m. or more of floor area.

However the applicant shall have the option of paying security deposit in the form of Bank Guarantee.

- (2) The security deposits shall be refunded within 60 days from the date on which completion certificate is produced. If the construction / development are not as per approved plan, this deposit shall be forfeited and separate action will be initiated against the builder / developer as per the provisions of the Act.
- (3) The security deposit will be refunded with 2% interest if the building is constructed / development is carried out as per the approved plan/ lay out.

## Plans

**8.**(1) All the plans shall be prepared and duly signed by a registered/empanelled technical person (*viz.*, Architect, Engineer, Structural Engineer, Town Planner, Supervisor) and Builder who shall

indicate their names, addresses, registration numbers on the body of the plan and in all other relevant documents. The plans shall also be signed by the concerned owner of the land.

- (2) All plans, drawings, statements, design details shall bear the signature of the applicant and shall be duly countersigned by an empanelled Architect/Technical person. All documents and plans related to structural designs shall bear the full name and full signature of a Structural Engineer. Plans and documents related to sanitary arrangements shall bear the full name and full signature of a Public Health Engineer.
- Note: 1. The Empanelled Architect who has prepared the plan shall put the empanelment number/COA Registration No. and seal on all plans and documents signed by him and shall also furnish a certificate to the effect that he shall supervise the construction of the building and shall be responsible for any deviation from the approved plan except if the owner/Architect/Technical person intimates that their agreement has been terminated.
  - 2. The Empanelled Structural Engineer, who has prepared the structural design, shall put his seal, and address on all the documents signed by him and shall also furnish a certificate to the effect that he shall supervise the structural part of the construction and shall be responsible for any structural failure except caused by unprecedented natural calamities in Form-VII and except if the owner intimates that his services have been terminated.
  - **3.** All aspects related to structural design, building surface, plumbing, electrical installation, sanitary arrangements, fire protection shall adhere to the specification, standards and code of practice recommended in the National Building Code of India, 2005 and any breach thereof shall be deemed to be a breach of the requirements under these Regulations
- (3) The technical personnel and builder as specified in sub-regulation (1) & (2) above shall have to be registered/empanelled with the Authority. Their qualifications and competence shall be as per Annexure I.
- (4) No plans for construction of apartment building, group housing and commercial building shall be entertained unless the builder is registered by the Authority in accordance with the competence as specified in the Annexure I. However for plots less than 500 sq.mtr of area, registration of builder is not mandatory.
- (5) When it comes to the notice of the Planning Member, Engineer Member, any Member of the Authority, or any other person that a plan signed by technical personnel or builder referred to under sub-regulation (1),& (2) is in violation of the norms of this regulation he shall bring this to the notice of the Authority.

- (6) The Authority shall issue a notice asking for a show cause within fifteen days as to why such technical personnel or builder shall not be disqualified/ black listed. After receipt of the show cause if any, the matter shall be placed before the Authority for a decision on such disqualification/ black listing. The decision of the Authority on disqualification/black listing shall be published in the notice Board of the Authority and in the Govt. Website.
- (7) An appeal against an order under sub-clause (6) above shall lie under section 18 of the Act.

#### Permission

- **9.** (1) No permission shall be required for the works specified in clause-12.4.1, Part-2 of National Building Code -2005 and section-15 of the Act.
  - (2) All clarifications with respect to deficiency in the plan, documents will be sought for from the applicant within reasonable time.
  - (3) Once the plan has been scrutinized and objections have been pointed out, the applicant shall modify the plan to comply with the objections raised and re-submit it. The Authority shall scrutinize the re-submitted plan and if there will be further objections, the plan shall be rejected.
  - (4) The Authority shall communicate either approval in Form-II or refusal in Form-IX within 60 days from date of receipt of application under Regulation-5.
  - (5) If the Authority, does not communicate its decision either granting or refusing permission to the applicant within 60 days from the date of receipt of the application by the Authority, the applicant shall draw the attention of the Vice-Chairman of the Authority with regard to his application, by registered post in Form-III. The Planning Member shall within the fifteen days from the date of receipt of notice in Form-III place the details of the case before the Vice-Chairman.
  - (6) If, within a further period of one month from the date of receipt of the application drawing such attention as mentioned in sub regulation (5) above, the Authority does not communicate its decision, either granting or refusing permission, such permission shall be deemed to have been granted to the applicant on the date following the date of expiry of the three months period.
  - (7)For stilt+3 and above building, conditional permission shall be accorded directing the builder to develop the onsite and off site infrastructure like connectivity of sewerage, drainage, water supply, road etc. as per the specification of the local Authority. Only after receipt of the NOC from the local Authority commencement of work order for construction of main building shall be given by BDA.

- (8) A residential building may be constructed by the owner of the land without prior approval of the plan by the Authority if the following conditions are satisfied:
- A. If the layout has been approved by the Authority under section 16 of the Act; or the land has been allotted by the Authority/General Administration Department.
- B. The road, drainage, sewerage and other infrastructure have been developed as per the approved layout.
- C. The plot size is not more than 300 square meters.
- D. The coverage is not more than 60 percent,
- E. The height is not more than 10 meters,
- F. No basement/stilt is to be constructed,
- G. The plan has been approved by a Registered Architect / Engineer empanelled with the Authority as defined under regulation 8 above,
- H. An application in Form-XII is submitted to the Authority, by Registered post with a copy of the plan, and the Record of Rights, 60 days prior to commencement of construction; and
- I. All other conditions of the regulations;

#### Note:

- (a) If the planning Member does not raise any objection within sixty days, permission shall be deemed to have been granted u/s 16 of the Act.
- (b) The owner shall have to submit a copy of the completion certificate as required under section 20 of the Act.
- (c) The owner and the builder shall remain responsible for any violation of the norms prescribed under the Regulations. Nothing in this provision will enable the owner and the builder to violate any of the provisions of the Regulations.
- (d) Detail guidelines in this regard shall be framed by the Authority from time to time.

## Maintenance of Register

**10.** A register in Form-IV containing the necessary particulars including information as to the manner in which applications for permission have been dealt with by the Authority shall be maintained.

## Duration of Permission

11. Every permission granted under these regulations shall remain valid up to three years. However the permission shall have to be revalidated before the

expiry of the above period on payment of such fee as may be prescribed under rules and such revalidation shall be valid for one year.

# Construction not according to plan

- 12. (1) If the Authority finds at any stage that the construction is not being carried on according to the sanctioned plan or is in violation of any of the provisions of these regulations, it shall notify the owner and no further construction shall be allowed until necessary corrections in the plan are made and the corrected plan is approved.
  - (2) If the owner fails to comply with the requirements at any stage of construction, the Authority may cancel the building permission issued and shall cause notice of such cancellation to be pasted upon the said construction. If the owner is not traceable at the address given in the notice, pasting of such notice shall be considered as sufficient notification of cancellation to the owner thereof. No further work shall be undertaken or permitted upon such construction until a valid building permission is issued thereafter.
  - (3) The notification under sub-regulation (2) shall also be published in as public notice.
  - (4) The Authority will also be at liberty to forfeit whole or part of the security deposit obtained from the builder/ developer during sanction of the plan.
  - (5) The above mentioned procedure shall also be followed in case of deviation of the layout.
  - (6) An appeal against an order under sub-regulation (2) & (4) above shall lie under section 18 of the Act.

# Information at the site of construction

- 13. (1) Whereas tests of any material are made to ensure conformity of the requirements of these regulations, records of the tests data shall be kept available for inspection during the construction of building and for such period thereafter as required by the Authority.
  - (2)The persons to whom a permit is issued during construction shall keep pasted in a conspicuous place on the property in respect of which the permit was issued;
  - A. a copy of the building permit; and
  - B. a copy of approved drawings and specifications

## Inspection

**14.** (1) As a matter of course all construction or work for which a permit is required shall be subject to inspection by the Authority at all reasonable hours with prior intimation.

(2) Inspection, where required, shall be made within seven days following the receipt of notice in Form-V or Form-VIII, after which period the owner will be free to go ahead with the construction according to the approved plan. At the first inspection, the Authority shall determine that the building construction has been taken up in accordance with approved site plans.

# Completion of construction

- 15. (1) The Authority shall permit an empanelled Architect/ Engineer to certify completion of building and issue of occupancy certificate for residential buildings designed by self or otherwise on a plot size up to 300 sq.mtrs. The responsibility of compliance with respect to provisions of these regulations shall rest with registered architect/engineer. However, the plans shall be required to be submitted to the Authority for information and record.
  - (2) The owner/concerned empanelled architect/engineer/structural engineer will serve a notice of completion certificate in Form VI( Part I and Part II) to the Authority that the building has been completed in all respects as per the approved plan. The said notice shall be accompanied by the following documents.
  - (a) Three copies of completed building plans.
  - (b) A fee of Rs.1000/-.
  - (c) Record of Rights relating to ownership.
  - (d) Copy of approved plan and approval letter.
  - (3) The deviations shall also be brought to the notice of the Authority (with relevant documents).
  - (4) The team of officials shall visit the site within 30 days and occupancy certificate shall be given.

# Certificate for occupancy

- 16. (1) The Planning Member with the approval of the Vice Chairman shall issue a certificate for occupancy, for part of a building during its construction or whole of the building after construction in Form-X or refuse occupancy, as the case may be, within 30 days from the date of inspection.
  - (2) Such certificate shall be issued only after all utility services for the entire building are physically provided.
  - (3) The occupancy certificate shall also state the use/type of occupancy of the building. However, the applicant may apply for change of use/occupancy permitted within the purview of the Development Plan/Zonal Plan/Zoning Regulations, where so required.
  - (4) In case of multi storied building and other special building like educational, assembly, institutional, industrial, storage and hazardous and mixed occupancies with covered area more than 500 sq.mtr., after

completion of the building and obtaining the occupancy certificate, periodic inspection shall be made by the Fire Authority to ensure the fire safety of the building and compliance with the provision of fire and life safety requirements ('Fire and Life safety', Part-4 of NBC). Periodic occupancy renewal certificate shall be issued by the Authority on the recommendation of the Fire Prevention Officer which shall also include safe keep of fire fighting installations and equipment for such building.

- (5) All occupied buildings and buildings covered under sub-regulation (4) above shall also be subject to periodic physical inspection by a team of multi disciplinary professionals of the Authority. This work may be outsourced by the Authority as may be deemed necessary. The team shall report compliance of bye-laws, natural lighting, and ventilation, besides structural and electrical safety. If any short comings/deficiencies or violation are noticed during inspection, the occupants shall ensure the compliance of the same within a specified time frame of six months. If not complied with, the building shall be declared unsafe. The period of inspection shall be usually three to five years but in any case not more than five years.
- (6) An appeal against the decision of the Authority shall lie under section 18 of the Act.

## Art commission

- 17. (1) Where the building plan accompanying the application seeking permission, requires the clearance of the Art Commission, Orissa, constituted under section 88, the Authority shall grant the permission only after the clearance is given by the said Commission. In all other cases, Architectural Control shall be regulated according to the provisions of these regulations.
  - (2) The Authority, on the recommendation of the Art Commission, may issue public notices, from time to time, prescribing the architectural norms in different zones.

# Construction near protected monuments

- 18. (1) No construction or re-construction of any building, within a radius of 100 meters, or such other higher distance from any archaeological site, as may be decided by the Archaeological Survey of India and Orissa State Archaeology Department from time to time, from the outer boundary of a declared protected monument shall be permitted.
  - (2) (i) No construction above 1<sup>st</sup> floor and above 7 (seven) meters shall be allowed beyond a radius of 100 meters and within a radius of 300 meters of such monuments.
  - (ii) The construction or reconstruction of any building under sub-regulation
  - (2) shall not be above 7 (Seven) meters of total height.

- (3)Notwithstanding anything contained in the sub-regulation (1) & (2) above, construction/re-construction/addition/alteration shall be allowed on production of clearance from A.S.I./State Archaeology Department as the case may be.
- (4) If a building or premises, not covered under The Ancient Monument Preservation Act, 1904, or The Ancient Monuments and Archaeological Sites and Remains Act, 1958, in the opinion of the Authority, is of historical or architectural interest, and is in danger of being demolished or altered or likely to be affected in its character by a development, the Authority shall not grant permission for construction over any land situated near the said building or premises. The matter shall be referred to the Art Commission, whose decision shall be final.
- (5) These provisions shall apply *mutatis mutandis* in respect of archaeological sites notified by the Art Commission.
- (6) An appeal against the decision under sub-regulation (3) shall lie under section 18 of the Act.

Construction near important buildings 19. No building exceeding 10 meters height shall be permitted within 200 meters radius from the boundary of the Governor's House, Orissa State Secretariat, Orissa Legislative Assembly, Official Residence of Chief Minister and such other buildings as may be decided by the Authority from time to time.

## Unsafe building

- **20.** (1) All unsafe buildings shall be considered to constitute danger to public safety and shall be restored by repairs or demolished or dealt with otherwise as directed by the Authority.
  - (2) The Authority shall examine or cause to be examined every building reported to be unsafe or damaged and shall make a written record of such examination.
  - (3) Whenever the Authority finds any building or portion thereof to be unsafe, it shall, in accordance with established procedure for legal notice, give to the owner or occupier of such building written notices stating the defects thereof. This notice shall require the owner or the occupier within a stated time either to complete specified repairs or improvements or to demolish and remove the building or portion thereof.
  - (4) The Authority may recording the reasons therefor direct in writing that the building which in its opinion is dangerous, or has no provision for exit in the event of fire, shall be vacated immediately or within the period specified for the purpose.
  - (5) If any person does not comply with the orders of vacating a building, the Authority may with the help of police remove the person from the building.

- (6) In case the owner or occupier fails, neglects or refuses to comply with the notice to repair or to demolish the said building or portion thereof, the Authority shall cause the danger to be removed either by demolition or repair of the building or portion thereof or otherwise.
- (7) In case of emergency, which, in the opinion of the Authority involves imminent danger to human life or health, the decision of the Authority shall be final. The Authority shall forthwith or with such notice as may be possible promptly cause such building or portion thereof to be rendered safe by retrofitting/strengthening to the degree of safety or removed. For this purpose, the Authority may at once enter such structure or land on which it stands, or abutting land or structure, with such assistance and at such cost as may be deemed necessary. The Authority may also get the adjacent structures vacated and protect the public by appropriate fencing or such other means as may be necessary.
- (8) Costs incurred under sub-regulations (6) & (7) shall be charged to the owner of the premises involved. Such cost shall be charged on the premises in respect of which or for the benefit of which the same have been incurred and shall be recoverable as provided under law.

## Demolition of building

- 21. (1) Before a building is demolished, the owner shall notify all utilities having service connections within the building, such as water electricity, gas, sewer and other connections. A permit to demolish a building shall not be issued until a release is obtained from the utilities departments stating that their respective service connections and appurtenant equipment, such as meters and regulators have been removed or sealed and plugged in a safe manner.
  - (2) The owner shall take all precautionary measures to avoid noise and dust pollution and shall not create any inconvenience to the neighboring plot owners.
  - (3) In case of semidetached building, no objection certificate from the neighbors shall be obtained.

# Responsibility and duty of the owner

- 22. (1) Neither granting of the permit nor the approval of the drawing and specifications, nor inspections made by the Authority during erection of the building shall in any way relieve the owner of such building from full responsibility for carrying out the work in accordance with the requirements of NBC 2005 and these regulations.
  - (2) Every owner/applicant shall:
  - A. Permit the Authority to enter the building or premises, for which the permission has been granted at any reasonable time for purpose of enforcing the regulations;

- B. obtain, where applicable, from the competent Authority permissions / clearance required in connection with the proposed work;
- C. give written notice to the Authority before commencement of work on building site in Form-V, periodic progress report in Form-VIII, notice of completion in Form-VI and notice in case of termination of services of Technical persons engaged by him and
- D. obtain an Occupancy Certificate from the Authority prior to occupation of building in full or part.

## Responsibility of Authority

- 23. (1) Approval of plans and acceptance of any statement or document pertaining to such plan shall not exempt the owner or person or persons under whose supervision the building is constructed from their responsibilities imposed under these regulations, or under any other law for the time being in force.
  - (2) Approval of plan would mean granting of permission to construct under these regulations only and shall not mean among other things:
  - A. the title over the land or building;
  - B. easement rights;
  - C. variation in area from recorded area of a plot or a building;
  - D. Structural stability;
  - E. workmanship and soundness of materials used in the construction of the buildings
  - F. Quality of building services and amenities in the construction of the building,
  - G. The site/ area liable to flooding as a result of not taking proper drainage arrangement as per the natural lay of the land, etc. and
  - H. Other requirements or licenses or clearances required for the site / premises or activity under various other laws.
  - (3) The approval or permission shall not bind or render the Authority liable in any way with regard to the matter specified in sub-regulation (2) (A.) to (H.) above

#### PART - III

#### **ZONING REGULATIONS**

#### Zoning

- 24. (1) In the Development Plan area, various use zones *viz*, residential, commercial, industrial, administrative, institutional, open space uses, transport & communication, green belt, natural drainage channel and water bodies having their zonal boundaries as indicated in the development plan shall be regulated as per the Table under regulation 25. Except as otherwise provided no structure or land hereinafter shall be used and no structure shall be erected, re-erected or altered unless its use is in conformity with these regulations.
  - (2) All places of worship, temples, churches, mosques, burial and cremation ground etc. as existing on 29.10. 2001 shall be exempted from being treated as non-conforming uses, provided that continuance of such uses are not detrimental to the locality as decided by the Authority from time to time.
  - (3) All non-conforming uses of land and buildings shall be discontinued by the owner and the modified uses shall be made to conform to the land use of the development plan in force within six months of the regulations coming in force.

## Different use of land

- 25. (1) Permission for different uses shall be accorded outright for principal use earmarked in the different zones described in column (2) of table No 3.
  - (2) Permission for different uses described in column-3 of the Table shall be permitted on special consideration on the recommendation of Development Plan and Building Permission (DP and BP) Committee and reasons for such consideration shall be recorded in writing.
  - (3) The purposes specified in column (4) of the said Table shall not be permitted in the areas reserved for particular uses.
  - (4) Residential buildings may be permitted in the open space use zone if the following conditions are satisfied along with other conditions of these regulations.

- A. the land is a stitiban land and is not a leasehold land;
- B. the coverage is not more than 40%;
- C. the height is not more than 7.0 (seven) meters; and at least 20 percent of land is used for plantation;
- (5) Mixed land use may be permitted in a particular zone on the recommendation of DP and BP committee. However, the main use shall cover not less than 2/3rd of the total floor area and the ancillary use shall not exceed 1/3rd of the total area.

TABLE-2: LAND USES PERMITTED/PROHIBITED IN DIFFERENT USE ZONES

Sl. No	Use Zone	Uses/Activities Permitted	Uses/Activities Permitted on application to the Competent Authority	Uses/Activities Prohibited
		(a)	(b)	(c)
1.	Residential Use Zone	<ol> <li>Residential, residential flat</li> <li>Hostel, Boarding and lodging houses</li> <li>Night shelters, foreign missions, dharamshala, guest houses</li> <li>Professional offices not exceeding one floor</li> <li>Educational buildings (nursery, primary, high – school, college)</li> <li>Research institutes</li> <li>Social, cultural and neighborhood, recreational institutions with adequate parking facilities</li> <li>Marriage hall, community hall</li> <li>Convenience shopping centers, local(retail) shopping</li> <li>Community centers, club, auditoriums</li> <li>Exhibition and art galleries</li> </ol>	(b)  1. Places of worship 2. Convenience shopping 3. Government and Semi-Government offices 4. Colleges and research institutions 5. Petrol Filling Stations 6. Places of entertainment 7. Cinema halls 8. Markets for retail goods, weekly markets, multi — purpose or junior technical shops 9. IT, IT enabled services 10. Tourism related services, transient visitor camps 11. Motor vehicle repairing workshop/ garages, storage of LPG gas cylinders	(c)  1. a Heavy, large and extensive industry, noxious, obnoxious and hazardous industries  2. Warehousing, storage godowns of perishables, hazardous, inflammable goods  3. Turnkey yards, 4. Workshop for buses etc. Slaughter housing  5. Wholesale mandis  6. Hospitals treating
		12. Library, gymnasium 13. Medicals, clinics, dispensaries, nursing	12. Burial – grounds, restaurants and hotels	contiguous diseases 7. Sewage

		home, health centers (20	13. Printing press	treatment
		beds)	14. Godowns	plant/disposal
		14. Public utilities and	/warehousing,	work,
		public buildings	15. Bus depots without	8. Water
		15. Nursery and green	workshop	treatment
		houses	1	plant, solid
		16. Household occupation if		waste
		the area for such use does		dumping
		not exceed one floor and		ground
		there shall be no public		10. Zoological
		display of the goods		garden,
		17. Banks and other		botanical
		financial institutions not		garden, bird
		exceeding one floor		sanctuary
		18. Bus stop, taxi stand		11. International
		19. Services for households		conference
		(saloon, parlors, bakery,		center
		sweet shop, dry cleaning,		12. Reformatory,
		internet kiosk, etc) not		district
		part of a residential		battalion
		building		offices,
		20. Police post		forensic
		21. Park/tot – lots, technical		science
		training center, yoga		laboratory
		center/health clinics		13. All uses not
				specifically
				permitted
2.	(a)	1. Retail business,	1. Place of	1. Polluting
	Commercial	mercantile	entertainment and	industries.
	Use Zone	2. Business and	recreational uses	2. Large scale
		Professional Offices	2. Place of worship	storage of
		3. Government/institutional	3. Service garage	hazardous
		offices, and semi	provided they do not	materials
		Government offices	directly abut the	expecting in
		4. Shops	main road	area,
		5. Services	4. Printing presses	specifically
		6. Restaurants, hotels	employing not more	earmarked for
		7. Hostels/Boarding houses,	than 10 persons.	the purpose
		social and welfare	5. 20 bed hospitals not	3. Dwellings
		institutions	treating contagious	except those
		8. Convenience/	diseases and mental	of essential
		neighborhood shopping	patients	watch and
		center, local shopping	6. Wholesale storage	ward
		centers, weekly/formal	yards.	personnel
		markets, bakeries and	7. Weigh bridge	4. Heavy,
		confectionaries	8. Polytechnics and	extensive,
		9. Cinema hall/theater,	higher technical	noxious,
		banquet halls, auditoriums	institutes	obnoxious,
		10. Guest houses	9. Sports/stadium and	hazardous
		11. Marriage hall, night	10. Public utility	and extractive

13. Residential plot/group housing 14. College 15. Religious places 16. Commercial centers 17. Research/training institute 18. Public utilities 19. Parking lots 20. Meat, fish, Vegetable & Fruit markets 21. Banks and financial services 22. Bus stop, taxi stand/3-wheeler stands 23. Filling and service stations 24. IT and IT enabled services 25. Telephone exchange  10. Zoological garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District batatalion offices 14. Forensic science laboratory and all other activities which may cause muisance	shelter	installation	industrial
housing 14. College 15. Religious places 16. Commercial centers 17. Research/training institute 18. Public utilities 19. Parking lots 20. Meat, fish, Vegetable & Fruit markets 21. Banks and financial services 22. Bus stop, taxi stand/3- wheeler stands 23. Filling and service stations 24. IT and IT enabled services 25. Telephone exchange 26. Poultry farms/slaughter houses, Nowages treatment/disp osal sites 8. Agricultural uses, storage of perishable and inflammable commodities 9. Quarrying of gravel, sand, clay and stone 10. Zoological garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battation offices 14. Forensic science laboratories treating contiguous diseases 6. Poultry farms/slaughter houses, slaughter houses, slaughter houses framment/disp osal sites 8. Agricultural uses, storage of perishable and inflammable commodities 9. Quarrying of gravel, sand, clay and stone 10. Zoological garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battation offices 14. Forensic science laboratories treating contiguous diseases 6. Poultry farms/slaughter houses, slaughter houses 12. Courts sports training contiguous diseases 6. Poultry farms/slaughter houses, slaughter houses, slaughter houses sla			
14. College 15. Religious places 16. Commercial centers 17. Research/training institute 18. Public utilities 19. Parking lots 20. Meat, fish, Vegetable & Fruit markets 21. Banks and financial services 22. Bus stop, taxi stand/3- wheeler stands 23. Filling and service stations 24. IT and IT enabled services 25. Telephone exchange 25. Telephone exchange  10. Zoological garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause muisance		_	
15. Religious places 16. Commercial centers 17. Research/raining institute 18. Public utilities 19. Parking lots 20. Meat, fish, Vegetable & Fruit markets 21. Banks and financial services 22. Bus stop, taxi stand/3- wheeler stands 23. Filling and service stations 24. IT and IT enabled services 25. Telephone exchange  25. Telephone exchange  10. Zoological garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratories treating contiguous diseases 6. Poultry farms/dairy farms, slaughter houses, 7. Sewages treatment/disp osal sites 8. Agricultural uses, storage of perishable and inflammable commodities 9. Quarying of gravel, sand, clay and stone 10. Zoological garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause muisance	<u> </u>		_
16. Commercial centers 17. Research/training institute 18. Public utilities 19. Parking lots 20. Meat, fish, Vegetable & Fruit markets 21. Banks and financial services 22. Bus stop, taxi stand/3- wheeler stands 23. Filling and service stations 24. IT and IT enabled services 25. Telephone exchange  25. Telephone exchange  10. Zoological garden and botanical garden on formational convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause muisance	- Contract of the contract of		
17. Research/training institute 18. Public utilities 19. Parking lots 20. Meat, fish, Vegetable & Fruit markets 21. Banks and financial services 22. Bus stop, taxi stand/3-wheeler stands 23. Filling and service stations 24. IT and IT enabled services 25. Telephone exchange 26. Telephone exchange 27. Telephone exchange 28. Quarrying of gravel, sand, clay and stone to Zoological garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause muisance	~ _	•	
institute 18. Public utilities 19. Parking lots 20. Meat, fish, Vegetable & Fruit markets 21. Banks and financial services 22. Bus stop, taxi stand/ 3-wheeler stands 23. Filling and service stations 24. IT and IT enabled services 25. Telephone exchange  26. Telephone exchange  27. Telephone exchange  28. Agricultural uses, storage of perishable and inflammable commodities 29. Quarrying of gravel, sand, clay and stone alo. Zoological garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance		residential use	
18. Public utilities 19. Parking lots 20. Meat, fish, Vegetable & Fruit markets 21. Banks and financial services 22. Bus stop, taxi stand/ 3- wheeler stands 23. Filling and service stations 24. IT and IT enabled services 25. Telephone exchange  26. Telephone exchange  27. Telephone exchange  28. Agricultural uses, storage of perishable and inflammable commodities  29. Quarrying of gravel, sand, clay and stone 10. Zoological garden and botanical garden, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battation offices 14. Forensic science laboratory and all other activities which may cause nuisance	_		_
19. Parking lots 20. Meat, fish, Vegetable & Fruit markets 21. Banks and financial services 22. Bus stop, taxi stand/3-wheeler stands 23. Filling and service stations 24. IT and IT enabled services 25. Telephone exchange  26. Telephone exchange  27. Telephone exchange  28. Agricultural uses, storage of perishable and inflammable commodities 29. Quarrying of gravel, sand, clay and stone 10. Zoological garden and botanical garden and botanical gardens, bird sanctuary 21. International convention center 22. Courts, sports training center, reformatory 31. District battalion offices 41. Forensic science laboratory and all other activities which may cause nuisance			
20. Meat, fish, Vegetable & Fruit markets 21. Banks and financial services 22. Bus stop, taxi stand/3- wheeler stands 23. Filling and service stations 24. IT and IT enabled services 25. Telephone exchange  25. Telephone exchange  26. Telephone exchange  27. Sewages 28. Agricultural uses, storage of perishable and inflammable commodities 9. Quarrying of gravel, sand, clay and stone 10. Zoological garden and botanical garden, shird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			
Fruit markets 21. Banks and financial services 22. Bus stop, taxi stand/ 3- wheeler stands 23. Filling and service stations 24. IT and IT enabled services 25. Telephone exchange 26. Telephone exchange 27. Sewages 28. Agricultural uses, storage 29. Quarrying of gravel, stand, clay and stone 10. Zoological garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause muisance	S	0	•
21. Banks and financial services  22. Bus stop, taxi stand/ 3-wheeler stands  23. Filling and service stations  24. IT and IT enabled services  25. Telephone exchange  25. Telephone exchange  26. Telephone exchange  27. Sewages treatment/disp osal sites  28. Agricultural uses, storage of perishable and inflammable commodities  29. Quarrying of gravel, sand, clay and stone  10. Zoological garden and botanical gardens, bird sanctuary  11. International convention center  12. Courts, sports training center, reformatory  13. District battalion offices  14. Forensic science laboratory and all other activities which may cause nuisance		X	•
services  22. Bus stop, taxi stand/ 3-wheeler stands  23. Filling and service stations  24. IT and IT enabled services  25. Telephone exchange  25. Telephone exchange  26. Telephone exchange  27. Sewages  28. Agricultural uses, storage of perishable and inflammable commodities  29. Quarrying of gravel, sand, clay and stone 10. Zoological garden and botanical gardens, bird sanctuary  11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			
22. Bus stop, taxi stand/ 3- wheeler stands 23. Filling and service stations 24. IT and IT enabled services 25. Telephone exchange  26. Telephone exchange  27. Telephone exchange  28. Agricultural uses, storage of perishable and inflammable commodities 9. Quarrying of gravel, sand, clay and stone 10. Zoological garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance	· ·		· ·
wheeler stands 23. Filling and service stations 24. IT and IT enabled services 25. Telephone exchange 25. Telephone exchange 26. Telephone exchange 27. Telephone exchange 28. Agricultural uses, storage of perishable and inflammable commodities 9. Quarrying of gravel, sand, clay and stone 10. Zoological garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause muisance			_
23. Filling and service stations 24. IT and IT enabled services 25. Telephone exchange 25. Telephone exchange 26. Telephone exchange 27. Telephone exchange 28. Agricultural uses, storage of perishable and inflammable commodities 9. Quarrying of gravel, sand, clay and stone 10. Zoological garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance	-		*
stations 24. IT and IT enabled services 25. Telephone exchange 25. Telephone exchange 25. Telephone exchange 25. Telephone exchange 26. Quarrying of gravel, sand, clay and stone lo. Zoological garden and botanical gardens, bird sanctuary 27. International convention center 28. Courts, sports training center, reformatory 29. Quarrying of gravel, sand, clay and stone lo. Zoological gardens, bird sanctuary 21. International convention center 21. Courts, sports training center, reformatory 21. District battadion offices 21. Forensic science laboratory and all other activities which may cause nuisance			
24. IT and IT enabled services 25. Telephone exchange  25. Telephone exchange  26. Telephone exchange  27. Telephone exchange  28. Telephone exchange  29. Quarrying of gravel, sand, clay and stone 10. Zoological garden and botanical gardens, bird sanctuary  11. International convention center  12. Courts, sports training center, reformatory  13. District battalion offices  14. Forensic science laboratory and all other activities which may cause nuisance	_		_
services 25. Telephone exchange  25. Telephone exchange  9. Quarrying of gravel, sand, clay and stone 10. Zoological garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			_
inflammable commodities  9. Quarrying of gravel, sand, clay and stone  10. Zoological garden and botanical gardens, bird sanctuary  11. International convention center  12. Courts, sports training center, reformatory  13. District battalion offices  14. Forensic science laboratory and all other activities which may cause nuisance			v -
commodities  9. Quarrying of gravel, sand, clay and stone  10. Zoological garden and botanical gardens, bird sanctuary  11. International convention center  12. Courts, sports training center, reformatory  13. District battalion offices  14. Forensic science laboratory and all other activities which may cause nuisance			
9. Quarrying of gravel, sand, clay and stone 10. Zoological garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance	25. Telephone exchange		*
gravel, sand, clay and stone 10. Zoological garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			
clay and stone 10. Zoological garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			
10. Zoological garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			~
garden and botanical gardens, bird sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			
botanical gardens, bird sanctuary  11. International convention center  12. Courts, sports training center, reformatory  13. District battalion offices  14. Forensic science laboratory and all other activities which may cause nuisance			
gardens, bird sanctuary  11. International convention center  12. Courts, sports training center, reformatory  13. District battalion offices  14. Forensic science laboratory and all other activities which may cause nuisance			~
sanctuary 11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			
11. International convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			gardens, bird
convention center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			•
center 12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			11. International
12. Courts, sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			convention
sports training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			
training center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			12. Courts,
center, reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			-
reformatory 13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			_
13. District battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			
battalion offices 14. Forensic science laboratory and all other activities which may cause nuisance			
offices 14. Forensic science laboratory and all other activities which may cause nuisance			
14. Forensic science laboratory and all other activities which may cause nuisance			
science laboratory and all other activities which may cause nuisance			
laboratory and all other activities which may cause nuisance			14. Forensic
and all other activities which may cause nuisance			science
activities which may cause nuisance			
which may cause nuisance			
cause nuisance			activities
nuisance			which may
			cause
Li			nuisance
noxious and			noxious and

3	(b) Wholesale Ware- housing and Storage.	<ol> <li>Wholesale and retail business.</li> <li>Wholesale and storage buildings</li> <li>Commercial and business offices/ work places</li> <li>Restaurants</li> <li>Public utilities</li> <li>Railway and road freight station</li> <li>Weigh bridge</li> <li>Banks and financial services/stock exchange</li> <li>Bus stop</li> <li>Parking space</li> <li>Petrol pumps and service stations on roads of 12 meter or more ROW</li> <li>Government and semi Government offices</li> <li>Convention center</li> <li>Godowns/ covered storage and warehousing</li> <li>Service centers/ garages/workshops</li> <li>Parks and open spaces Museums, library</li> <li>Police station/ posts, post offices</li> </ol>	1. Truck terminal and parking 2. Freight terminal 3. Junk-yards 4. Service garage 5. Non- polluting, non- obnoxious light industries 6. Warehousing/storag e godowns of perishable, inflammable goods, coal, wood, timber yards 7. Bus and truck depots 8. Gas installation and gas works 9. Water treatment plants 10. Railway yards/stations 11. Incidental/ancillary residential use	obnoxious in nature 15. All uses not specifically permitted in the column (a) and (b)  1. Polluting Industries 2. Large scale storage of hazardous and other inflammable materials excepting in areas, specifically earmarked for the purpose. 3. All uses not specifically permitted in columns (a) and (b)
3.	Industrial use zone,	<ol> <li>All kind of industries</li> <li>IT</li> </ol>	1. Technical education	1. Polluting industries
	light manufactur	<ul><li>3. ITES</li><li>4. Financial services</li></ul>	institutions 2. Government and	2. General Residences
	ing	5. Textiles and apparels	semi government	3. General
	industry,	6. Food processing	buildings	business
	service industry	industries 7. Agro processing	3. Private business offices	unless incidental to
	and	industries	4. Hotels	and on the
	medium	8. Common facility centers	5. Noxious, obnoxious	same site with
	industry	9. Tool rooms	and hazardous	industry.
		10. Industrial research	industries except	4. Any
		institutions	storage of perishable	manufacturin
		11. Non polluting industries	and inflammable	g

- 12. Light engineering
- 13. Auto components
- 14.Electrical and electronic goods
- 15. Pharmaceuticals
- 16. Beverages
- 17. Breweries
- 18. Small scale industries
- 19. SEZs notified by government of India
- 20. Activities associated with film production
- 21. Computer hardware
- 22. Machine tool industry
- 23. Convention centers
- 24. Exhibition stalls
- 25. Transport terminals
- 26.Hospitals to cater to the industrial workers
- 27. Medical center
- 28.Recreational facilities for industrial workers
- 29. Parks and playgrounds
- 30. Restaurants
- 31.Services for industrial workers
- 32.Residential buildings for essential staff and for watch and ward
- 33. Public utilities
- 34. Parking, loading, unloading spaces
- 35. Warehousing, storage and depots of non perishable and non-inflammable commodities and incidental use
- 36. Cold storage and ice factory
- 37. Gas godowns
- 38. Cinemas
- 39. Wholesale business establishments
- 40. Petrol filling station with garages and service stations

goods

- 6. Junkyards
- 7. Sports/stadiums/playgrounds
- 8. Sewage disposal works
- 9. Electric power plants, service stations
- 10. Cemeteries,
- 11. Banks and financial institutions
- 12. Helipads
- 13. Hospitals/medical centers, religious buildings
- 14. Taxi stands
- 15. Gas installations and gas works
- 16. Animal racing or riding stables
- 17. Workshops/garages
- 18. Dairy and farming
- 19. Quarrying of gravel, sand, clay and stone
- 20. Other industries and facilities as suggested by the Industries Department of Government in consultation with Orissa Pollution Control Board and the Authority

- establishment detrimental by way of nuisance or hazard
- 5. Industries
  not permitted
  by Orissa
  Pollution
  Control
  Board
- 6. Residential dwellings other than those essential operational and watch and ward staff
- 7. Schools and colleges
- 8. Hotels, motels
- 9. Caravan parks, recreational spots or centers
- 10. Other nonindustrial related activities
- 11. Irrigated and sewage farms
- 12. Major oil
  depot and
  LPG refilling
  plants
- 13. Commercial offices, educational institutions, social buildings
- 14. All uses not specifically permitted in column (a) and (b)

4.	Public
	Semi-Public
	Use Zone.

- 1. Local, State and Central Govt. Offices
- 2. Semi-government
- 3. Public undertaking offices
- 4. Universities and specialized educational institutions, schools
- 5. Educational and Medical Institutions, Research institutions, college
- 6. Hotels/ guest houses
- 7. Commercial uses center, other uses/activities
- 8. Shopping complex
- 9. Social and cultural institutions/welfare centers
- 10. Libraries
- 11. Community hall
- 12. Conference halls, auditoriums
- 13. Marriage hall, dharamashala
- 14. Hospitals/nursing home/health center/clinic/dispensary
- 15. Hostels
- 16. Public utility buildings
- 17. Uses incidental to Govt. Offices
- 18. Local Municipal offices
- 19. Monuments and religious
- 20. Museums/art galleries/libraries exhibition halls
- 21. Institutions
- 22. IT,ITES, Financial services
- 23. Multi level car parking
- 24. Convention center
- 25. Banking and financial services
- 26. Police stations, police lines, jails, fire stations, post offices
- 27. Uses for defense purpose, defense quarters, educational and police headquarters

- 1. Residential flats, residential plots for group housing and staff housing
- 2. It services
- 3. Hostels, transit accommodation
- 4. Entertainment and recreational complexes
- 5. Nursery and kindergarten, welfare center
- 6. Open air theater, playground
- 7. Residential club, guest house
- 8. Truck terminals, helipads

- 1. Heavy,
  extensive and
  other
  obnoxious,
  hazardous
  industries,
- 2.
  Slaughterhous
  es, junkyard,
  wholesale
  mandies
- 3. Dairy and poultry farms, farmhouses
- 4. Workshops for servicing and repairs, processing and sale of farm products and
- 5. Uses not specifically permitted herein
- 6. All uses not specifically permitted in column (a) and (b)

		20 Dug and Dail		
		28. Bus and Railway Passenger terminals		
		29. Incidental/ancillary		
		residential use		
5.	Utilities and	1. Public utilities and	1. Water supply	
<i>J</i> .	Services	buildings, solid waste	installations	
	Services	dumping grounds	2. Sewage disposal	
		2. Local municipal facilities	works	
		like water supply,	3. Service stations	
		sewerage, drainage, solid	4.	
		waste	Cemeteries/graveyar	1. Any building
		3. Booking office	ds	or structure
		4. Radio and television	5. Warehouse/storage	which is not
		station	godowns	required for
		5. Tele communication	6. Health center for	uses related
		centers, telephone	public and staff or	to public
		exchange	any other use	utilities and
		6. Cremation grounds and	incidental to public	activities is
		cemeteries, burial grounds	utilities and services	not permitted therein.
		7. Police post, fire post	7. Nursery and	2. All uses not
		8. Post and telegraph office	kindergarten,	
		9. Observatory and weather	welfare center	specifically permitted in
		office	8. Residential club,	column (a)
		10. Power plants/ electrical	guest house	and (b)
		substation	9. Community hall	ana (b)
		11. Incidental/ancillary	10. Truck terminals,	
		residential use	helipads	
			11. Commercial uses	
			center, other uses/	
			activities	
6.	Recreation	1. Specialized parks/	1. Building and	1. Any building
		maidans for multipurpose	structure ancillary to	or structure,
		use	use permitted in	which is not
		2. Special recreational	open spaces and	required for
		zones	parks such as stands	open air
		3. Special education areas	for vehicles on hire,	recreation,
		4. Regional parks, district	taxis and scooters 2. Commercial use of	dwelling unit
		parks, playgrounds, children traffic parks	transit nature like	except for
		5. Botanical/zoological	cinemas, circus and	watch and
		garden, bird sanctuary	other shows	ward, and
		6. Clubs	3. Public assembly	uses not
		7. Community hall	halls	specifically
		8. Stadiums, picnic huts,	4. Restaurants and	permitted
		holiday resorts	5. Caravan parks	therein.
		9. Shooting range, sports	6. Open air cinemas/	2. All uses not
		training center	theatre	specifically
		10. Swimming pools	7. Entertainment and	permitted in
		11. Bus and railway	recreational	column (a)
		passenger terminals,	complexes	and (b)

7. Transportat ion Use Zone  1. Bus bays, Auto stand, Bus shelter, information kiosk 2. Parking areas 3. Multi level car parking 4. Filling stations 5. Transport offices, booking office 6. Night shelter, boarding houses 7. Banks 8. Restaurants 9. Workshops and garages 10. Automobile spares and services, Godowns 11. Loading and unloading platforms (with/without cold storage facility), weigh bridges 12. Ware houses, Storage depots  1. Tourism related projects 2. Way side shops and restaurants 3. All ancillary (complimentary) uses for above categories (subject to decision of the Authority) 2. All uses specificat related to transport communi n permitte column (a and (b)	
13. Bus and Truck terminals 14. Railway stations yard, depots 15. Airport 16. Incidental/ancillary residential use	lly and catio ed not lly
8. Agriculture Use Zone  Horticulture 2. Dairy and poultry farming, milk chilling center 3. Storage, processing and sale of farm produce 4. Dwelling for the people engaged in the farm (rural settlement) 5. Farm houses and  1. Houses incidental to this use. Place of worship, Dharmasala, lodging, rest shed etc 2. Educational and research institutions 2. Heavy, extensive cultural buildings noxious of	t uses ' in ral

Q	Water	6. Forest land 7. Brick kilns and extractive areas 8. Cottage industries 9. Burial and cremation grounds 10. Solid waste management sites 11. Construction of building by government/development authorities beyond the existing developed basti area 12. Building construction over plots covered under town planning scheme and conforming uses 13. Petrol and other fuel filling stations 14. Public utility and facility buildings 15. Incidental/ancillary residential use	5. Wayside shops and restaurant 6. Hospital for infectious and contagious diseases, mental hospital after clearance of the Authority 7. Agro serving, agro processing, agro business 8. Extensive industry 9. Service industries accessory to obnoxious and hazardous industries 10. Ice factory, cold storage, 11. Godowns and warehouses 12. Petrol pump, garages and workshops 13. Studio 14. Activities related to tourism 15. Green buildings 16. Normal expansion of land uses only in the existing homestead land 17. Sewage disposal works 18. Electric power plant 19. Quarrying of gravel, sand, clay or stone	industries 3. Any activity which is creating nuisance and is obnoxious in nature.
9.	Water bodies Use Zone	<ol> <li>River, canal</li> <li>Streams, water spring</li> <li>Ponds, lakes</li> <li>Wetland, aqua culture pond</li> <li>Reservoir</li> <li>Water logged/marshy area</li> </ol>	Any other use/activity incidental to Water bodies Use Zone is permitted.	Use/activity not specifically related to Water bodies Use not permitted herein.
10.	Special Area Use Zone	<ol> <li>Old built-up areas         having mixed land use.</li> <li>Areas of historical or         archaeological</li> </ol>	Any other use / activeity incidental to Special Areas Use Zone is	Use/activity not specifically related to Special Areas

<ul> <li>importance having historical monuments and architecturally important buildings.</li> <li>3. Areas of scenic value and needs to be preserved without spoiling the character by putting up various kinds of structures.</li> </ul>	permitted.	Use Zone not permitted herein.
4. Village Settlements		

#### PART - IV

#### **GENERAL**

## Restriction on permission

- **26.** (1) Without prejudice to any other stipulation in these regulations, no permission to construct a building on a site shall be granted:
  - A. in areas of natural waterways or drains, as detailed in the Development Plan, and drainage plan as modified from time to time;
  - B. if the orientation of such building is not in harmony with the surroundings, as may be decided by the Art Commission;
  - C. if the use to which the site is proposed to be put does not conform to the use earmarked in the Development Plan;
  - D. if the building is to be constructed over or under a municipal drain, sewerage line, electrical line, water main, any other government or public land, or public utility services;
  - E. if the foundation of the external wall along a street is located at a distance less than 0.5 meters from the edge of the street or road margin including the drain;
  - F. as Bhubaneswar is located in Seismic Zone III, if all Structural Plans are not prepared taking this into account.

# Distance from Electric lines

27. (1) As provided in clause-6.4 of National Building Code-2005 no verandah, balcony or the like shall be allowed to be erected or re-erected or any additions or alterations made to a building within the distances quoted below in accordance with the Indian Electricity Rules between the building and any overhead electric supply line;

#### TABLE - 3: MINIMUM DISTANCE FROM THE ELECTRIC LINE

	Vertical distance in	Horizontal distance in
	meters	meters
Low and medium voltage	2.5	1.2
lines and service lines		
High voltage lines up to and	3.7	1.2
including 11,000 Volt		
High voltage lines above	3.7	2.0
11,000 volt and up to and		
including 33,000 Volt		
Extra high voltage line	3.7	2.0
beyond 33,000 Volt	(Plus 0.3 meters for	(Plus 0.3 meters for
	every additional	every additional 33,000
	33,000 volts or part	volts or part thereof)
	thereof)	_

#### **Plantation**

**28.** In every building area, at least 10% of the land shall be covered by plantation, but in case of multi-storied buildings/ Group Housing / Apartment building/ Industrial/ Assembly/ Educational/ Institutional buildings, at least 20% of the land shall be covered by plantation.

### Means of access

- **29.** (1) Every building/ plot shall abut on a public/ private means of access like streets /roads of duly formed of width as specified in clause 4, Part-3 of NBC-2005.
  - (2) In no case, development of plots shall be permitted unless it is accessible by a public/private street of width not less than 6 meters.
  - (3) In case of institutional, administrative, assembly, industrial and other non residential and non-commercial activities, the minimum road width shall be 12 meter.
  - (4) In case of a private road, which gives access to one or more buildings, the owner of the said private road shall develop the road and storm water drain as required by the Local Authority, and transfer the same by way of gift to the Local Authority or handed over to the Registered Residents' Welfare Association for maintenance.

#### Minimum

**30.** The minimum size of plots for different categories of building is given below:

#### size of plots

TABLE - 4: CATEGORY WISE SIZE OF PLOTS

Category	Min. road	Min. size of plot in
	width(m)	Sq. m.
Kalyan Mandaps	18	1000
Cinema, game centers, Multiplex,	18	2000
convention centers		
Social clubs and amenities	12	1000
Multi storey car parking	12	1000
Office buildings	12	300
Primary/Upper Primary school	12	2000
High School, Residential school	12	6000
+2 College / Junior college	12	4000
Degree College	18	6000
Technical educational institution	18	10000
Petrol pumps / Filling stations	18	500
Restaurant	12	500
LPG storages	12	500
Places of congregation	12	500
Public libraries	12	300
Conference hall	15	1000
Community hall	12	500
Nursing homes/polyclinics	12	300

Hotel	18	2000
R & D Lab	15	1500

**Note:** In exceptional cases the Authority may consider revising the minimum size of plot on the recommendations of the Development Plan & Building Permission (DP&BP) Committee.

**31.** (1) The minimum setbacks and height of buildings permissible in a given size/plot for residential and commercial building in non high rising category shall be as follows;

Minimum setbacks & Height for non-high rise buildings

TABLE – 5: PLOT SIZE WISE PERMISSIBLE SET BACKS AND HEIGHT OF BUILDINGS

Plot	Maximum	Front setback (in Mts) Abutting road width				Minimum setbacks other sides(in Mts)		
size (in Sq. Mts)	height of building permissible (in Mts)	tnan 9 Mtc	9 Mts and below 12 Mts	12 Mts and less than 18 Mts	18 Mts and less than 30 Mts.	Above 30 Mts.	Rear side	Other side
1	2	3(a)	<b>3(b)</b>	3(c)	<b>3</b> (d)	3(e)	4	5
Less than 100	7						1.0	
100 & upto 200	10	1.5	2.0	2.5	3.0	4.5	1.5	1.5
Above 200 & upto 300	10						2.0	1.5
Above 300 & upto 400	12	1.5	2.0	3.0	3.0	4.5	2.5	1.5
Above 400 & upto 500	12	1.5	2.0	3.0	3.0	4.5	3	2
Above 500 & upto 750	15	1.5	2.0	3.0	4.0	4.5	3	3
Above 750	15						4	4

- (2) In case of group housing, the minimum distance between two buildings will not be less than  $1/3^{rd}$  of the height of the taller building. However the minimum width of the internal road shall be 6 m.
- (3) The set backs/open spaces for other occupancies shall be as below;
- A. Educational buildings In case of nursery schools, the open spaces around the building shall not be less than 3 meter and for all other educational buildings the open spaces around the building shall not be less than 6 meter.

- B. Institutional buildings the open spaces around the building shall not be less than 6 m.
- C. Assembly buildings the open space in front shall be not less than 12 m and the other open spaces around the building shall not be less than 6 m.
- D. Commercial & Storage buildings In case of plots with more than 500 sq.mtr. area, the open spaces around the building shall not be less than 4.5m.
- E. Industrial buildings the open spaces around the building shall not be less than 4.5 m for heights up to 15 meter, with an increase of 0.25 meter for every increase of 1 meter or fraction thereof in height.
- F. Hazardous occupancies the open spaces around the building shall not be less than 6 m.
- G. IT,ITES and other Corporate Buildings:- In case of plots up to 750 sqm the minimum set backs around the building shall not be less than 3 mtr. In case of plots above 750 sq.mtr the minimum set backs around the building shall not be less than 4.5 mtr.

Minimum setbacks for high rise buildings

**32.** For high-rise/ multi-storied buildings, the open spaces around the building shall be as given in the Table below;

TABLE-6: PROVISION OF EXTERIOR OPEN SPACES AROUND THE BUILDINGS

Sl. No.	Height of the Building Upto (m.)	Exterior open spaces to be left out on all sides in m. (front rear and sides in each plot)
1	15	5
2	18	6
3	21	7
4	24	8
5	27	9
6	30	10
7	35	11
8	40	12
9	45	13
10	50	14
11	55 and above	16

Note: (i) On sides where no habitable rooms face, a minimum space of 9.0 m. shall be left for heights above 27.0 m.

(ii) In case of multi storied buildings the exterior open space around a building shall be of hard surface capable of taking load of fire engine weighting up to 45 tonnes.

#### Floor Area Ratio

**33.** (1) The Floor Area Ratio (F.A.R) for residential, commercial, corporate, IT/ITES buildings shall be decided on the basis of the road width on which the plot/site abuts.

TABLE - 7: FAR AS PER ROAD WIDTH.

Road width in m.	FAR for Commercial /Residential building.	FAR for /IT /ITES/Corporate buildings
Up to 6	1.00	
6 or more & less than 9	1.50	
9 or more & less than 12	1.75	
12 or more & less than15	2.00	2.00
15 or more & less than18	2.25	2.25
18 or more & less than30	2.50	2.50
30 & above	2.75	2.75

- (2) In case of group housing the maximum permissible FAR shall be 2.00. However additional FAR up to 0.25 shall be allowed for dwelling units meant exclusively for LIG/EWS.
- (3) In case of Institutional and Assembly building the maximum permissible FAR shall be 1.50 for plots up to 1000 sq. m. and 1.75 for plots above 1000 sq. m.
- (4) In case of transport related activities such as; railway yards, railway station, bus stands, bus shelters, transport depot, air port, special ware housing, cargo terminals etc. the maximum permissible FAR shall be 1.00.
- (5) In case of Industrial building the maximum FAR shall be 1.00.
- (6) In case a part of the plot is acquired / donated for public purpose like road, drain, etc., the Authority may allow additional FAR up to 0.25 in the form of TDR (Transferable Development Right) as per the modality approved by the Authority.
- (7) The Authority may allow premium FAR up to 0.25 on IT/ITES buildings on payment of fees to be decided by the Authority from time to time, on roads of width 30 mt. and above. The Authority may refund the fee proportionate to 0.10 premium FAR in case of platinum/ gold certified green buildings.

- (8) The benefit of unutilized FAR in respect of Apartment Buildings/ Group Housing shall be made available to the society and not to the Builder/ Developer.
- (9) Exclusive multistorey parking blocks can be provided within the required setback area without reducing the driveway for the fire tender to the extent of minimum 6 meters. This will not be included in the calculation of coverage and FAR.

#### (10) FAR shall not include

- A. Basements or cellars and space under a building constructed on stilts and used as a parking space, and air conditioning plant room used as accessory to the principal use;
- B. Electric cabin or substation, watchman booth of maximum size of 3 sq.m. with minimum width or diameter of 1.732 m., pump house, garbage shaft, space required for location of fire hydrants, electric fittings and water tank, society room of maximum 12 sq.mtr.
- C. Projections and accessories buildings as specifically exempted from the open space/setback requirement.
- D. Staircase room and lift rooms above the topmost storey, architectural features, and chimneys and elevated tanks of dimensions as permissible under the NBC; the area of the lift shaft shall be taken only on one floor

## Height of a building

- **34.** (1) The height of the building shall be governed by the limitations of Floor Area Ratio, open space (setbacks), and the width of the street facing the plot described as detailed below:
  - A. The maximum height of a building shall in no case exceed 1.5 times X the width of the road on which the plot abuts + the front setback. However, higher height on account of premium FAR may be permitted with the approval of the Government.
  - B. If a building abuts on two or more streets of different widths, the building shall be deemed to face upon the street that has the greater width and the height of the building shall be regulated by the width of the street.
  - (2) Notwithstanding anything contained in sub-regulation (1) the height restrictions with respect to approach Funnels and Transitional area of Airport as detailed in Table -8 & 9 shall be adhered to.

## TABLE – 8: HEIGHT RESTRICTION WITH RESPECT TO APPROACH FUNNELS

	111110110111101111		
Distance from nearest		Maximum Permissible height above the	
	runway end (in metres)	elevation of the nearest runway end (in	

	metres)
Up to 360	0
361 to 510	6
511 to 660	9
661 to 810	12
811 to 960	15
961 to 1110	18
1111 to 1260	21
1261 to 1410	24
1411 to 1560	27
More than 1560	30

TABLE – 9: HEIGHT RESTRICTION WITH RESPECT TO TRANSITIONAL AREA

Distance of the Inner Boundary of the Transitional Area (Outer Boundary of the Air Port) [Metres]	Maximum Permissible height above the elevation of the air port reference point [metres]
Up to 21	0
22 to 42	3
43 to 63	6
64 to 84	9
85 to 105	12
106 to 126	15
127 to 147	18
148 to 168	21
169 to 189	24
190 to 210	27
More than 210 M	30

- (3) Notwithstanding anything contained in the Tables under sub-regulation (1), no Radio Aerial, T.V. Antenna, Cell phone tower or such similar type of installations exceeding 52 metres in height shall be erected without prior permission of the concerned Civil Aviation Authority.
- (4) No building structure or installation exceeding the height indicated in the said Tables shall be permitted unless the applicant produces a 'No-Objection Certificate' from the Airport Authority.

## Off Street Parking Space

35. (1) In all buildings including Apartment buildings/ Group Housing, Hotels, Restaurants and Lodges, business buildings, commercial buildings, Institutional buildings like hospitals, Educational buildings like schools and colleges, multi-storied buildings/complexes etc. and all other non-residential activities provision shall be made for parking spaces as per the following requirements.

## TALBE – 10: OFF STREET PARKING SPACE FOR DIFFERENT CATEGORY OF OCCUPANCIES

Sl. No.	Category of building/ activity	Parking area to be provided as percentage of total built up area
(1)	(2)	(3)
1	Shopping malls, Shopping malls with Multiplexes/ Cineplexes, Cinemas,	60
	Retail shopping centre, IT / ITES complexes and hotels.	
2	Restaurants, Lodges, Other commercial buildings, Assembly buildings, Offices and High-rise buildings/ complexes	40
3	Residential apartment buildings, Group Housing, Clinics, Nursing Homes, Hospitals, Institutional and Industrial buildings.	30

- N:B: Parking to be provided as percentage of total built up area may be in basement/stilt floor and setback/open spaces at ground level.
  - (2) The parking spaces may be provided in (for all schemes)
  - A. Basements or cellars
  - B. on stilt floor
  - C. open parking area
  - D. exclusive multi level parking or
  - E. Roof top parking in case of commercial/IT/ITES and Corporate building
  - F. a combination of any or all of the above
  - (3) Off-street parking spaces 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.
  - (4) If the total off-street parking space required under these regulations is provided by a group of property owners at a place for their mutual benefit, such parking spaces may be construed as meeting the off-street parking requirement, however, subject to the approval of the Authority. The Authority may also decide to develop such parking spaces and charge property owners to bear proportionate cost.
  - (6) Garage with locking facilities shall be included in the calculation of floor space for determining the requirement of parking space, unless this is

provided in the basement of a building or under a building constructed on stilts with no external walls.

- (7) The parking spaces to be provided shall be in addition to the open spaces (setback) required around a building under these regulations. However, parking may be provided in the front open space and other side open spaces without reducing the clear vehicular access way to less than 6.0 meters.
- (8) Misuse of the area specified for parking of vehicles for any other use shall be summarily removed / demolished by the Authority.
- (9) For parking spaces in basements and upper storey of parking floors, at lease two ramps of minimum 3.6 m width or one ramp of minimum 5.4 m width and in maximum 1:10 slope shall be provided. Such ramps may be permitted in the side and rear setbacks after leaving 6 meter space for movement of fire-fighting vehicles. Access to these may also be accomplished through provisions of mechanical lifts.
- (10) Up to 10% of cellar may be utilized for utilities and non-habitation purpose like A/C plant room, Generator room, Electrical installations, laundry etc.
- (11) At least 20% of the parking in group housing, apartment buildings shall be earmarked for visitors. The Visitors parking facility shall be open to all visitors.
- (12) Every building except a residential building having less than four dwelling units will have parking space earmarked for ambulance, fire tender and physically challenged persons.
- (13) In respect of Apartment Complexes/Building/Block, in sites up to 750 sq m the parking requirement shall be deemed to be met if the entire stilt floor is left for parking. A WC/Toilet facility shall be provided for watch and ward in the stilt floor.
- (14) Apart from use of Basement for Services/Parking/ Storage, it may be used for other activities like library, Study Room, Games Room and Laundry only in case of Residential and Institutional Buildings.

### Interior open space

36. (1) At least one side of all the rooms intended for human habitation, if such room does not abut on the front or the rear or the side setbacks, shall abut on an interior open space whose minimum dimension shall be 3 meters X 3 meters in cases of buildings up to a height of 12 meters. In cases where the height of the building is more than 12 meters, the width of the interior open space shall be increased at the rate of one meter for every additional 3 (three) meters height. This provision shall be applicable to all categories of buildings, namely, residential, group housing, commercial, institutional, administrative, assembly.

(2) For ventilating the spaces for water closets and bathrooms ventilation shafts shall be provided with size as provided under clause - 8.2.5, part-3 of NBC, 2005.

# Height exemption of a building

- **37.** (1) The following appurtenant structures shall not be included in the height of the building.
  - A. Roof tanks and their supports (with support height not exceeding 1 m.)
  - B. Ventilating, air conditioning, lift rooms and similar service equipments
  - C. Stair cover (mumty) not exceeding 3.0 m. in height and
  - D. Chimneys, parapet walls and architectural features not exceeding 1.2 m. in height.
  - E. Height of the ceiling of the upper basement roof not exceeding 1.5 mtr from the average surrounding ground level.

# Exemption in Open space

- **38.** (1) Every open space provided either in the interior or exterior in respect of any building shall be kept free from any erection thereon and shall be open to the sky and no cornice, roof, or weather shade of more than 0.75 m. in width shall overhang or project over such open space.
  - (2) A portico of up to 2.5 m. width and 4.6 m. length with a minimum height of 2.1 m. from the plinth level may be permitted within the side setback. A garage is permissible at the rear end of side open space provided no openings are located on the side and rear boundary. Access to the top of the portico/garage should not affect the privacy of the neighboring plot.
  - (3) The portico provided as above should not rest on the boundary wall and should be open to provide through access to the rear. In case the Portico is not a cantilevered one and supported by pillars the area shall be included in the FAR.

## Basement / Cellar

- **39.** (1) Basements/cellars shall not be permitted in low lying area and areas without adequate drainage facilities to ensure drainage from the basement.
  - (2) Construction of basements/cellars may be allowed by the Authority in accordance with the provisions contained in the development plan applicable to the concerned area.
  - (3) The basements/cellars shall only be put to the following uses:
  - A. Storage of household or other non-combustible materials;

- B. Strong room, bank cellars etc;
- C. Installation of air-conditioning equipments and other machines used for service and utilities of building;
- D. Parking places.
- (4) Individual residential and small commercial buildings (plot size maximum 500 Sq. Meter) may have one basement. However maximum two basements/cellars may be permitted to be constructed for other buildings leaving the prescribed set back/ open space applicable to the building. Further, in case of apartment/ group housing/commercial/corporate & IT /ITES buildings the basements may be allowed to be constructed under the entire plot area leaving 3 meter space from the boundary of the premises subject to the following;
- (i) In all such cases the owners have to indemnify the Authority against any damage caused by her/him/them to the adjacent property.(Form-XI).
- (ii) The portion of the basement projecting out of the building line shall flush with the ground.
- (5) The basements shall be used exclusively for parking/services/storage.
- (6) The basement shall fulfill the following requirements:
- A. Every basement shall be in every part at least 2.5 m. in height from the floor to the soffit of the roof slab or ceiling;
- B. Adequate ventilation shall be provided for the basement. The standard of ventilation shall be the same as required by the particular occupancy according to regulations. Any deficiency may be met by providing adequate mechanical ventilation in the form of blowers, exhaust fans (one exhaust fan for 50 Sq.m. of basement area), air conditioning system etc;
- C. The minimum height of the ceiling of upper basement shall be 1.20 m. and the maximum, 1.5 m. above the average surrounding ground level;
- D. Adequate arrangement shall be made, so that surface drainage 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 in to account in design and adequate damp proofing treatment is given;
- F. The access to the basement shall be separate from the main and alternative staircase providing access and exit from higher floors shall be provided. Where the staircase is continuous in the case of buildings served by more than one staircase, the same shall be of enclosed type serving as a fire separation from the basement floor and higher floor.

- Open ramps shall be permitted if they are constructed within the building line subject to provision of (D) above.
- G. The ramp providing access to basement to be used for parking shall have a gradient not steeper than 1:10 and this shall not obstruct the clear vehicular and pedestrian movement around the building including movement of fire tender (6 meter).

### Provision of Lift

- **40.** (1) Lift shall be provided for buildings above 10 m. height in case of apartments, group housing, commercial, institutional and office buildings.
  - (2) Lift shall be provided at the rate of one lift for twenty dwelling units, or part thereof for residential buildings and at the rate of one lift per one thousand Sq.m. or part thereof of built-up area per floor for non-residential buildings. Built-up area on ground floor and two upper floors shall be excluded in computing the above requirement.
  - (3) Notwithstanding anything contained in these regulations in case of building with 21 m. or more in height, at least two lifts shall be provided.

#### Mezzanine

41. Mezzanine floor may be permitted above any floor in all types of buildings up to an extent of one-third of the actual covered area of that floor. All Mezzanine floors shall be counted toward FAR calculation, except the mezzanine floor over the ground floor.

#### Heritage Zone

- **42.** (i) The Authority may notify the Heritage Zones in consultation with the Archaeological Survey of India, State Department of Archaeology, Bhubaneswar Municipal Corporation and the Art Commission.
  - (ii) Conservation of Heritage Buildings, Heritage Precincts and Natural features: Conservation of buildings, artifacts, structures, areas and precincts of historic and /or aesthetic and/or architectural and /or cultural significance (Heritage buildings and heritage precincts) and/or natural features of environmental significance shall be taken up by the Bhubaneswar Municipal Corporation in accordance with the relevant provisions in-force and those framed from time to time.

#### Barrier free access for the physically challenged person

**43.** Barrier free environment is one, which enables people with disabilities to move about safely and freely and to use all facilities within the built environment. The goal of barrier free design is to provide an environment that supports the independent functioning of individuals so that they can get into and participate in all activities without assistance.

The main purpose is to integrate disabled and elderly persons fully into the society. In view of the above, the Government of India has enacted the

Disabilities Act, 1955. Section 44, 45 and 46 of the said Act stipulates that the appropriate Governments, local authorities to ensure provisions of barrier free facilities in all new Government buildings and public utilities roads and transport. Also, in 1996 Government of India enacted another persons with Disabilities (Equal Opportunity, Protection of Rights and Full Participation) Act for the Barrier Free Environment for differently abled persons.

#### (1) Site development:

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

#### (2) Access Path/ Walk Way:

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

#### (3) Parking:

For parking of vehicles of handicapped people the following provisions shall be made:

- A. Surface parking for two car spaces shall be provided near entrance for the physically handicapped persons with maximum travel distance of 30 meter from building entrance.
- B. The width of parking bay shall be minimum 3.6 meter.
- C. The information stating that the space is reserved for handicapped persons 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.

#### (4) Building requirements:

The specified facilities for the buildings for handicapped persons shall be as follows:

- Approach at plinth level
- Corridor connecting the entrance/exit
- Stairways
- Lift
- Toilet
- Drinking water

- A. **Approach at plinth level:** Every building must have at least one entrance accessible to the handicapped and shall be indicated by proper signage. This entrance shall be approached through a ramp together with stepped entry.
- B. **Ramp Approach:** Ramp shall be finished with non slip material. Minimum width of ramp shall be 1800 mm. with maximum gradient 1:12, length of ramp shall not exceed 9 meter having 800 mm high hand rail on both sides extending 300mm beyond top and bottom of the ramp. Minimum gap from the adjacent wall to the hand rail shall be 50mm.
- C. **Stepped Approach:** For stepped approach width of tread shall not be less than 300 mm. and maximum riser shall be 150 mm. Provision of 800 mm. high hand rail on both sides of the stepped approach similar to the ramp approach shall be made.
- D. **Exit/Entrance Door:** Minimum clear opening of the entrance door shall be 900mm and it shall not be provided with a step that obstructs the passage of a wheel chair user. Threshold shall not be raised more than 12 mm.
- E. **Entrance Landing:** Entrance landing shall be provided adjacent to ramp with the minimum dimension 1800mmx 2000 mm. The entrance landing that adjoins the top end of a slope shall be provided with floor materials to attract the attention of visually impaired persons (limited to coloured floor material whose colour and brightness is conspicuously different from that of the surrounding floor material or the material that emits different sound to guide visually impaired persons hereinafter referred to as "guiding floor material"). Finishes shall have a non slip surface with a texture traversable by a wheel chair. Curbs wherever provided must blend to a common level.
- F. Corridor connecting the entrance/exit for the handicapped: 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 persons either by a person or by signs, 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 1250 mm.
- iii. In case there is a difference of level, slope ways shall be provided with a slope of 1:12
- iv. Hand rails shall be provided for ramps/slope ways at a height of 800 mm.
- (7) **Stair ways:** One of the stairways near the entrance/exit for the handicapped shall have the following provisions:

- A. The minimum width shall be 1350 mm.
- B. Height of the riser shall not be more than 150mm and width of the tread 300mm. The steps shall not have abrupt (square) nosing.
- C. Maximum number of risers on a flight shall be limited to 12.
- D. Hand rails shall be provided on both sides and shall extend 30mm on the top and bottom of each flight of steps.
- (8) Lifts: Wherever lift is required as per bye-laws, provision of at least one lift shall be made for the wheel chair user with the following cage dimensions of lift recommended for passenger lift of 13 persons capacity by Bureau of Indian Standards.

Clear internal depth: 1100mm Clear internal width: 2000mm. Entrance door width: 900 mm.

- A. A handrail not less than 600 mm. long at 1000mm. above floor level shall be fixed adjacent to the control panel.
- B. The lift lobby shall be of an inside measurement of 1800 mm x 1800 mm or more.
- C. The time of an automatically closing door shall be minimum 5 seconds and the closing speed should not exceed 0.25 meter/sec.
- D. The interior of the cage shall be provided with a device that audibly indicates the floor the cage has reached and indicates that the door of the cage for entrance/exit is either open or closed.
- E. The control panel shall have marking in Braille to help visually impaired.
- (9) Toilets: One special Water Closet. in a set of toilets shall be provided for the use of handicapped with essential provision of washbasin near the entrance for the handicapped.
- A. The minimum size shall be 1500 x 1750 mm.
- B. Minimum clear opening of the door shall be 900mm and the door shall swing out.
- C. Suitable arrangement of vertical/horizontal handrails with 50mm clearance from wall shall be made in the toilet.
- D. The Water Closet seat shall be 50mm from the floor.
- (10) **Drinking Water:** Suitable provision of drinking water shall be made for handicapped near the special toilet provided for them.
- (11) **Designing for Children:** In a building meant for the predominant use of the children, it is necessary to suitably alter the height of the handrail and other fittings and fixtures.

# Rainwater harvesting system

**44.** (1) Provision of rain water harvesting is mandatory for all plots, which are more than 300 Sq.m. in area. The dimension of recharging pits/trenches shall

be at least 6 cubic meters for every 100 Sq. m. of roof area. Percolation Pits shall be filled with small pebbles or brick jelly or river sand and covered with perforated concrete slabs. Apart from this, the following requirements are optional and may be provided depending on site conditions.

- A. **Terrace Water Collection:** The terrace shall be connected to a sump or the well through a filtering tank by PVC pipe. A valve system shall be incorporated to enable the first part of the rainwater collected to be discharged out or to the soil if it is dirty. A filtering tank measuring 0.36 Sq. m. can be constructed near the sump. The tank can be divided by a perforated slab and one part should be filled by small pebbles and other by brick jelly. The bottom portion of the tank should have a slope to avoid stagnation of water.
- B. **Open Ground:** Where there is open ground, a portion of topsoil shall be removed and replaced with river sand to allow slow percolation of rain water. Any other method proved to be effective in conservation and harvesting of rainwater may be adopted in each and every construction taken up.

C.

Signs and outdoor display structures

**45.** (1) Signs and outdoor display structures shall be governed by the relevant provisions of the Orissa Municipal Corporation Act/Orissa Municipal Act. (2)Within the Bhubaneswar Development Plan area where no specific guideline for the above structures is framed, the Authority shall prescribe the guidelines with approval of Government.

## Reference to the standards

**46.** The standards relating to water and sanitation requirements for various occupancies and uses, fire protection and fire safety requirements and guidelines for installation of solar water heating system shall be referred to as given at Annexure-IV.

#### **PART-V**

#### Apartment

- **47.** (1) No apartment building shall be permitted on plots less than 500 Sq. m. in size.
  - (2) In apartment building with joint ownership of land the owner / developer shall provide floor space for house owner's society Office / assembly at the rate of 1 Sq. m. per / flat provided that the minimum area shall not be less than 12 Sq. m..
  - (3) One staircase for every 6 dwelling units or fraction there of in a floor shall be provided.

## Group housing

- **48.** (1) The minimum size of site for group housing shall be 4000 sq. m.
- (2) In addition to other requirements the group housing schemes shall be accompanied by
  - A. A services and Utilities plan as per standards for water supply system, drainage and storm water disposal system, sewerage system, rain water harvesting structures, and for other utilities.
  - B. A landscape plan including rainwater harvesting / water recycling details.
  - C. Parking & internal circulation plan along with Common pool parking area plan, if any. The above shall be drawn on suitable scale with relevant details.
  - (3) The minimum abutting road width shall be 9 m. for non high-rise and 18 m. for high-rise building blocks and must be black topped.
  - (4) Common facilities like shopping centre, community hall or centre/club etc shall be provided in up to 5% of the built up area and shall be planned and developed in cases where the units are above 50 in number and not to be part of the residential blocks.
  - (5) A black topped unhindered public access road of at least 7.5 meter width shall have to be developed on any one side of the periphery as per suitability and feasibility for the convenience of accessibility of other sites and lands located in the interior.
  - (6) In case of blocks up to 12 m. heights, access through pathways of 6 m. width would be allowed. All internal roads and pathways shall be developed as per standards.
    - (7) Minimum 15% of site area shall be earmarked for organized open space and be utilized as greenery, tot lot or soft landscaping, etc. This space may be in one or more pockets.

#### Outhouse

**49.** An outhouse with zero rear and one side set back may be permitted on a plot having an area not less than 150 sq.m.,

provided that:

- (1) the coverage of the outhouse shall not exceed 30 sq.m. and the height shall not exceed 3 m.;
- (2) the built up area of the outhouse and that of the main building together shall not exceed the permissible FAR for the concerned plot;
- (3) the outhouse shall not cover more than one third of the width and more than one fourth of depth of the plot and shall not abut any public road;
- (4) a minimum 1.5 m. strip of land shall be kept open to the sky between the main building and the outhouse;
- (5) no opening either in the form of windows or doors or ventilators shall be provided to the adjoining properties;
- (6) outhouses with sloping roof would only be permitted. In no case permission for outhouses would be granted with reinforced concrete cement flat roof.

### Requirements for Basti Area

- **50.** (1) In a Basti area, permission to erect a building may be given on the basis of the available width of means of access, provided that where the width of means of access is 4.5metre or less, the coverage shall be limited to 50% of the plot area and the maximum height of the building limited to two storey and the F.A.R. limited to 1.00.
  - (2) For plots with narrow width (7.5metres) zero setbacks may be allowed on one side with a passage of one meter on the other side.
  - (3) The rear setback and front setback shall not be less than 3.0 m. and 1.5 m. respectively.
  - (4) In each house on a Basti plot having one side setback, an internal court-yard of not less than 10 sq. m. in area and not less than 2.5 m. in width shall be provided in such a way that at least one wall of each living room abuts such court-yard or a verandah opening to such court-yard.

#### Semidetached and row housing

- **51.** (1) Owners of adjacent similar dimension plot abutting a road may be permitted to construct row or semi-detached buildings.
  - (2) The orientation of the row or semi-detached building shall preferably be such that the prevailing south-west summer breeze can be availed by each dwelling unit.

- (3) For semi-detached buildings over two adjacent plots, the setbacks, the height and the FAR shall be regulated by treating both the plots as one.
- (4) In case of row housing, the length of a row shall not exceed 30 m. along the road on which such houses abut. In case, the dwelling units in a row are scattered the maximum length of the road shall be 100 m..
- (5) For row houses the ground coverage shall not be allowed to exceed 60% and the FAR more than 1.50.
- (6) The minimum size of the plot on which a unit of a row housing may be allowed shall be 30 sq. m..

### Shop cum residence

52. Where plots are allotted in a row for shop-cum-residential purpose the Authority may allow construction of shop-cum-residential building without any side set backs up to a depth of 10 meters from the front exterior wall. Provided that no part of the building up to said depth is used for residential purpose on the ground floor. No building exceeding 11 meters in height shall be allowed to be constructed as a shop-cum-residential plot, unless so permitted under the zonal Development Plan, provided that the shop-cum-residence shall have 2/3<sup>rd</sup> of the total floor area used for shops. The FAR and other parameters shall conform to that specified for commercial buildings.

#### Cinema, Multiplex and Theatre building

- **53.** (1) The relevant provisions of the Orissa Cinemas (Regulations) Rules, 1954 shall apply for planning, designing and construction of Cinema and Theatre buildings
  - (2) No permission for construction of a building to be used as a cinema hall, theatre or auditoria for cultural show shall be granted unless the construction of such buildings conforms to the provisions of the Orissa Cinema (Regulations Act, 1954 and the Orissa Cinematograph Rules, 1939 or any other law in the subject for the time being in force in the State.
  - (3) No permission to construct a cinema hall on a site shall be given unless such site has been approved by the Authority for the purpose
  - (4) Excepting provision for restaurant and incidental facilities no other use shall be permitted in a cinema building.
  - (5) All cinema, theatre or auditoria buildings shall conform to IS; 4898-1968 and acoustics design of such buildings shall adhere to the requirements of IS; 2526-1963.
  - (6) Exits and fire safety requirements shall be in accordance with Part IV (Fire and life safety) of National Building Code of India, 2005.

Liquefied petroleum

gas

54. (1) Vacant space shall be maintained at all times, with the following distances for storage shed used for the storage of liquefied petroleum gas cylinders between any building, public space, public road or any adjoining property which may be built upon and the said storage shed.

TABLE – 11: MINIMUM DISTANCES REQUIRED FOR STORAGE SHED OF LIQUIFIED PETROLIUM GAS CYLINDERS

Quantity of Compressed Gas in	Minimum Clear Distance to be kept
Cylinders (Kg.)	(metres.)
0-100	1
101 –1000	3
1001- 4000	5
4001-8000	7
8001-12000	9
12001-30,000	12
Over 30,000	15

(2) Notwithstanding anything contained in the conditions specified above, cylinders containing liquefied petroleum gas exceeding 100 Kilograms but not exceeding 300 Kilograms may be kept in a storage shed forming part of, or attached to building, if it is separated there from by a substantial partition and the only means of access to it is from outside. Such a storage shed shall not be situated under any staircase or near other entrances to or exits from the rest of the building or other buildings. A shed used for storage of liquefied petroleum gas cylinders shall be surrounded by a suitable fence to prevent unauthorised persons from having access to the shed.

#### Petrol Pump

- **55.** (1) Minimum distance from the road intersections shall be:
  - A. For minor roads having less than 30 m. width 50 m.
  - B. For major roads having width 30 m. or more 100 m.
  - (2) The minimum distance of the property line of petrol pump from the centre line of the road shall not be less than 15 meters on roads having less than 30 m width. In case of roads having 30 m or more width, the width of the road shall be protected.
  - (3) Plot size:
  - A. Only for filling stations 30 m X 17 m

- B. Filling-cum-service station -36 m X30 m
- C. Frontage of the plot shall not be less than 30 m
- (4) New petrol pump shall not be located on roads having less than 30 m width

#### (5) (A) Other controls

- i. Ground coverage 20% ii. FAR - 20 iii. Max. height - 7 m
- iv. Canopy equivalent to permissible ground coverage within setback line.
  - v. Front set back minimum 6 m

#### (B) Other regulations

- i. NOC from Explosives/Fire Department
- ii. License from the District Magistrate
- iii. Ground coverage will exclude canopy area

#### (C) Compressed Natural Gas (CNG) mother station

- i. Plot size (Max) 36 m X 30 m
- ii. Maximum ground coverage 20%
- iii. Maximum height 7 m (single storey)
- iv. Building component control room/office/dispensary, store, pantry and W.C.

#### Farm House

- **56.** For construction of Farm House Building in Green belt Use Zone
  - (1) Minimum size of plot- Minimum size of a plot for farmhouse shall not be less than 1.00 hectare.
  - (2) Maximum coverage and FAR shall be as given in the table below-

#### TABLE – 12: MAXIMUM COVERAGE AND FAR

a	Maximum permissible ground	15 percent
	coverage for all types of activity	
b	Maximum permissible FAR	0.25
С	Residential accommodation of watch	100 sq. m.
	and ward/maintenance staff	
d	Maximum height	7 m.
e	Setbacks	Front/side abutting road 15.0
		m. and all other sides 9.0 m.

(3) Other Provisions: Minimum 50 percent of the total area of the farmhouse shall be under plantation/cultivation. At least 100 trees per hectare shall be planted out of which at least 50 percent shall be evergreen trees.

#### (4) Water supply, Sewerage and drainage:

- A. In case of a plot for a farmhouse having dwelling units, the owner thereof shall be responsible to make lawful arrangements for potable water.
- B. The owner shall be responsible to provide drains in the farm house to be used for rain water and in case of dairy farm open or closed sanitary drains to clean sheds, as may be required by the Authority.
- C. The owner shall be responsible to provide septic tank with necessary disposal trenches for disposal of human and animal waste in the farmhouse within his own premises.
- (4) Electrification The owner of a farmhouse shall obtain electric connection directly from the appropriate authority authorized for distribution on such terms and conditions at his own cost as decided by the appropriate Authority from time to time.

#### **PART-VI**

#### INTEGRATED TOWNSHIP

#### Large Projects

- **57. (1)** Integrated Townships with minimum 10 Ha of land having access from minimum 30 m. R/W road shall be allowed. The road shall have adequate provision for cycle track, footpath, covered drain, plantation, street light and under ground utilities.
  - (2) The integrated Township shall be permitted in Residential / Institutional zones.
  - (3) Permissible land use within the township (%)

A.	Residential		- 45-50
B.	Industrial (Non Polluting)	-	- 8-10
C.	Commercial		- 2-3
D.	Institutional		- 6-8
E.	Recreational		- 12-14

- (4) Other regulations for approval of Integrated Township
  - **A.** At least 10% of the total area shall be reserved for parks and open space. It shall be developed and maintained by the developer.
  - **B.** At least 5% of the site area shall be reserved for public and semi-public use and shall be handed over to the Authority free of cost and the same shall be allotted by the Authority for development either to the developer or others on lease basis.
  - **C.** The FAR shall be calculated on the total area.
  - **D.** Road shown in Comprehensive Development Plan shall be incorporated within the plan and shall be handed over to the Local Authority free of cost after development.
  - **E.** The FAR and coverage shall be 2.50 and 40% respectively.
  - **F.** At least 15% of the housing units developed will be earmarked for EWS/LIG category.
  - **G.** At least one of the major interconnecting roads shall be 18 mtr R/W and shall be open ended.

#### PART - VII

## MULTI-STOREYED BUILDINGS AND GROUP HOUSING SCHEMES/APARTMENTS: ADDITIONAL REQUIREMENTS

#### Restriction on construction of Multi-storied building

- **58.** (1) Construction of multi-storied building shall not be permitted in villages namely Bhubaneswar, Kapileswar, Rajarani and Dhauli, Mukunda Prasad &Gadakhurda. The Authority may include any other areas for prohibition of multi storied building from time to time.
  - (2) The Authority may restrict construction of multistoreyed buildings in any other area on the basis of objective assessment of the available infrastructure and planning needs after obtaining due approval of the Government.
  - (3) Before commencement of these regulations, where permission has been granted conditionally, such cases shall be dealt with under corresponding provisions of these Regulations without any major change, or removal of construction, subject to the condition where violation of Heritage Zone conditions has occurred, this relaxation shall not apply.
  - (4) No multi-storied building shall be allowed to be constructed:
  - **A.** with approach road less than 18 m. width;
  - **B.** on plot the size less than 2000 sq. m., and
  - **C.** within 100 meters. from the centre of the National High way on either side.

### Stages of permission

- **59.** Permission for construction of a multi-storied buildings, & Group Housing Schemes shall be given with the approval of the Authority and in following stages, namely:-
  - **A.** In the first stage permission shall be accorded conditionally to develop the infrastructure as per specification of Local Authority and Public Health Engineering Department.
  - **B.** After joint inspection, up to 75% of the proposed building height shall be allowed.
  - **C.** After completion of construction up to 75% of the proposed building as per the approved plan and plantation of 20% of the plot area the remaining 25% construction shall be allowed.

*Note:* The plantation shall not obstruct free movement of fire tenders around the building.

### Commencement of work

- **60. (1)** Every applicant or builder or owner shall submit a notice regarding his intention to commence the foundation work of the proposed multi-storied building to the Authority through authorised technical persons. The said notice shall be accompanied by the approved plan and shall be in Form-V.
  - (2) Soon after the receipt of the notice referred to in sub- clause (1) above, the Authority shall send a team of officers to the proposed building site and the layout for foundation of the proposed multi-storied building shall be made in presence of those officers. The team shall also submit a report to the Authority to the effect that the layout has been made as per the approved plan.
  - (3) During or soon after the construction of the foundation work of the multi-storied building, the Vice-chairman of the Authority or his representatives or independent Engineer/ Architect appointed by Authority shall inspect the construction to ensure that the setbacks, coverage, basement if any, and foundation standards are done according to the approved plan.
  - (4) The applicant/builder shall submit periodic progress report after casting of each floor slab in Form-VIII.

# Liability of defective construction

- **61. (1)** For defective constructions, the Authority shall sue the owners, builders, architects, and the engineers for both civil and criminal liabilities, besides taking action under these regulations.
  - (2) Without prejudice to the provisions of the Act, the actions to be taken by the Authority shall include stop construction notices, cancellation of permission, and removal of unauthorized constructions, which shall be notified.

#### Maintenance

- **62. (1)** The main entrance to the premises shall not be less than 5 (five) meters in width in order to allow easy access to fire engine. The gate shall fold back against the compound wall of the premises, thus leaving the exterior access way, within the plot, free for the movement of fire service vehicles. If archway is provided over the main entrances, the height of the archway shall not be less than 5 (five) meters.
  - (2) For multi-storied group housing scheme on one plot, the access way within the premises shall not be less than 7.5 (seven and half) meters in width and between individual building blocks, there shall be an open unbuilt space of 6 (six) meters.

- (3) The space set apart for providing access within the premises shall, in no case, be included in the calculation of requirements pertaining to parking spaces and other amenities required to be provided for the building.
- (4) Every access way shall be properly drained and lit to the satisfaction of the Authority. Manhole covers or any other fittings laid within the right of way of the access way shall be flushed with the finished surface level of it so as not to obstruct safe movement of men and vehicles.
- (5) Reconstruction or addition or alteration to any multi-storied building shall not be taken in a manner which shall reduce the width of the access way to a level below the minimum prescribed limit under these regulations.

Exit

- **63. (1)** Every multi-storey building meant for human occupation or assembly, shall be provided with exit sufficient to permit safe escape of the occupants in case of fire or other emergencies.
  - (2) An exit may be a door-way, corridor, passage way to an internal or external staircase or to a verandah or roof or terrace having access to a street.
  - (3) Exits shall be so arranged as to provide continuous means of access to the exterior of a building or exterior open space leading to a street without passing through any occupied unit.
  - (4) Exits shall be so located that the travel distance on the floor shall not exceed twenty meters in case of residential, educational, institutional and hazardous occupancies and thirty metres in the case of assembly, business, mercantile, industrial and storage occupancies. Wherever more than one exit is required for a floor of a building, exits shall be placed at a reasonable distance from each other as possible. All the exits shall be accessible from the entire floor area at all floor levels.
  - (5) There shall be at least two exits serving every floor and at least one of them shall lead to a staircase.
  - (6) The width of every exit shall not be less than one metre and shall be provided as per the following table.

TABLE – 13: NUMBER OF OCCUPANTS AS PER TYPE OF OCCUPANCY

Sl. No.	Type of	Number of occupants per unit exit	
	occupancy	Stair Case	Terrace
(1)	(2)	(3)	(4)
1	Residential	25	75
2	Mixed and other	50	75
	uses		

#### **Explanation:**

- **A.** Lifts and escalators shall not be considered as an exit.
- **B.** 'Travel distance' means the distance from any point in the floor area to any exit measured along the path or egress except that when the floor areas are sub-divided into rooms, used singly or of rooms and served by suite corridors and passage, the travel distance may be measured from the corridor entrance of such rooms or suites to the nearest staircase or verandah having access to the street.

ICT landing points

**64.** Every multi storied building complex shall have provision for Information and Communication Technology (ICT) landing point in the form of a room near the main entrance gate of dimension not less than 3 m x 4 m. and having 3 m. clear height. The room shall have two fire proofs doors of 1.2 m. width opening outwards along with adequate ventilation in the form of windows/ ventilators. Such room shall not be counted in coverage and FAR calculations.

Penal Action against Builders / Technical personnel

- **65. (1)** Notwithstanding anything contained in these regulations, the Authority reserves the right to debar/ black list the builder/ technical person who has deviated from the professional conduct or has made any fraudulent statement or has misrepresented/suppressed any material facts in his application/ plan or is involved in construction of the building deviating from the approved plan/norms of these regulations.
  - (2) Before taking any action under clause (1) specified above, the Authority shall issue a notice specifying the reasons thereof asking for a show-cause within 15 days as to why such builder/technical person shall not be debarred/black listed. After receipt of the show cause, if any, the same shall be placed before the Authority for a decision on debarring/black listing the technical person/builder. The decision of the Authority in this regard shall be published in the Notice Board of the Authority and the Govt. website.
  - (3) An appeal against an order under sub-clause (2) above shall lie under section 18 of the Act.

# Occupancy of the building.

- **66.** In addition to the general provisions contained in regulation-16 and partial modification thereof the following provisions shall be followed in case of multi storied buildings, apartments and group housing schemes;
  - (1) No person shall occupy or allow any other person to occupy any part of the multi-storied building for any purpose until such building or any part of it, as the case may be, is granted occupancy certificate by the Authority.
  - (2) On receipt of completion certificate in Form-VI (Part-I & Part-II) the Planning Member with the approval of Vice-Chairman shall issue a provisional occupancy certificate in Form-X to enable the builder/land owner to obtain service connections.

The authorities entrusted with the job of providing services like electricity, water supply and sewerage shall not provide such services without provisional occupancy certificate by the Authority. However, temporary service connection may be provided for construction purpose.

- (3) The builder shall cause to register an Association of apartment owners as required under the Orissa Apartment Ownership Act, 1982, before occupancy certificate for 50% or more of the floor area is given.
- (4) The Builder shall submit a copy of the agreement it has entered into with the apartment owners' society. This agreement shall contain the terms of maintenance of public utilities.
- (5) On satisfactory compliance of above & provision of the services the final occupancy certificate shall be issued by the Planning Member with approval of the Vice-Chairman.

# Completion of construction

- **67.** Every applicant/ owner shall submit a notice in Form-VI (Part-I and Part-II) regarding completion of the construction of multi-storied building, to the Authority through the registered Architect/Structural Engineer, who has supervised the construction. The said notice shall be accompanied with the following documents:
  - **A.** Three copies of plan of the completed building.
  - **B.** A fee of Rs.5000.
  - **C.** Record of Rights (ROR) relating to ownership.
  - **D.** Evidence to the effect of all public utility services, and in particular, sewerage, drainage, water supply, and electricity have been linked to the main public utility system.
  - E. No Objection Certificate from Fire Prevention Officer

# Issue of occupancy certificate

**68.** (1) The Authority on receipt of the notice of completion, along with all the required documents, shall take a decision to either issue or refuse

occupancy certificate in Form-X within 60 days from the date of receipt of such notice which shall be published in the Notice Board of the Authority and in the Govt. website.

- (2) If the occupancy certificate is not issued by the Authority within sixty days from the receipt of notice, the owner shall draw the attention of the Vice-Chairman of the Authority in this regard in the Form-XIII. If within the further period of two month the authority does not communicate its decision either granting or refusing occupancy certificate, such issue of occupancy certificate shall be deemed to have been granted to the owner on the date following the date of expiry of said two months.
- (3) Where occupancy certificate is refused by the Authority, reasons recorded thereof shall be communicated to the applicant and the same shall be published. An appeal against such a decision will lie under section 18 of the Act. The Appellate Authority shall be competent to seek the views of, and implead as parties, authorities in charge of public utility services, as provided under the Act, under the Orissa Apartment Ownership Act,1982, and apartment owners. Where non-provision of public utilities is likely to affect other residents, such residents may also be impleaded as parties.

Structural Safety Design and other services requirements

- **69. (1) Structural Design:** The structural design of foundation, masonry, timber, plain concrete, reinforced concrete, pre-stressed concrete and structural steel shall be carried out in accordance with Part-VI structural design, section-1 loads, section-2 foundation, section-3 wood, section-4 masonry, section-5 concrete and section-6 steel of National Building Code of India taking into consideration all relevant Indian Standards prescribed by Bureau of Indian Standards including the Indian Standard given in IS-Code 1893-1984, 13920-1993, 4326-1993, 13828-1993, 13827-1993 and 13935-1993 for structural safety.
  - (2) Quality of Materials and Workmanship: All material and workmanship shall be of good quality conforming generally to the accepted standards of Public Works Department and Indian standard specification and codes as included in Part-V Building Materials and Part-VII Construction practices and safety of National Building Code of India.
  - (3) Alternative Materials, Methods of Design and Construction and Tests: The provisions of these regulations are not intended to prevent the use of any material or method of design or construction not specifically prescribed by these regulations provided any such alternative has been approved. The building materials approved by B.I.S. or any statutory body will form part of the approved building material and technology as part of the regulations.

#### (4) Building Services

**A.** The Planning design and installation of electrical installations, air conditioning installation of lifts and escalators can be carried out in accordance with Part-VIII Building Services, section—2 electrical

installation, section–3 air conditioning and heating, section-5 installation of lifts and escalators of National Building Code of India, 2005

**B.** The requirements of electric sub-station and the provision of electric sub-station shall also require approval from the concerned Authority.

# (5) Plumbing Services

The planning, design, construction and installation of water supply, drainage and sanitation and gas supply system shall be in accordance with Part-IX, Plumbing Services, section-1 water supply; section-2 drainage and sanitation and section-3 gas supply of National Building Code of India 2005.

#### Part - VIII

#### DEVELOPMENT AND SUB-DIVISION OF LAND REGULATIONS

- Application 70. (1) Applications for subdivision of land for utilizing selling, leasing out or otherwise disposing it off as referred to in clause(a) of sub-section(1) of section 16 of the Act shall be made to the Authority in Form-1.
  - (2) The applications for subdivision shall be in addition to the requirements specified in regulation-5(2)(iii) accompanied by
    - i. a copy of the title deed of the land in question;
    - ii. an affidavit with regard to the right, title and interest of land and such other particulars as the Authority may require;
    - iii. an authenticated copy of the certificate with regard to the payment of development charges, if any, under, Chapter-IX of the Act, provided that submission of such certificate shall not be necessary if the provisions of Chapter-IX of the Act has not been brought into force in the area in which the concerned land is located;
    - iv. an authenticated copy of the receipt towards payment of the scrutiny fee to the Authority as prescribed under rule-18;
    - v. a no-objection certificate ,from the lessor in case the land is not leasehold unless the lease deed permits undertaking sub-division as applied for:
    - vi. a site plan traced out of revenue village settlement map in operation indicating therein in red colour the lands to which the application relates and surrounding plots;
  - vii. an index plan of the site showing adjoining areas within a radius of 150 m. round from the proposed site marking clearly therein the boundaries of the proposed layout in red colour, existing road, structures, burial ground and high tension or low-tension power line passing through the site of the layout plan and the level of the site;
  - viii. a detailed plan to a scale not less than 1:100 showing the proposed layout(sub-division)indicating size of plot width of the proposed road, open space and amenities provided;
    - ix. land use analysis indicating the survey plot number, the bye-plot number, the detailed dimensions of all the plots, the area of each-plot and the use to which they are proposed to be put;

- x. in case of land originally belonging to any religious endowments, a noobjection certificate from the endowment commissioner or wakf board as the case may be; and
- (3) Where permission for sub-division of land is granted, such permission shall be communicated to the applicant in Form II within 60 days from the receipt of the application.
- (4) Where permission for sub-division of land is refused such refusal shall be communicated to the applicant in Form IX.

Use in relation 71. to development plan

- (1) Subdivision of land shall normally be permitted for the purpose for which the concerned land is earmarked in the development plan. Such subdivision may be for residential, commercial industrial, institutional or combination of one or more of this purpose or such other purpose as may be considered conforming to the provisions in the development plan:provided that in every subdivision plan spaces for roads, community facilities and public utilities as specified in this part or such other facilities as the Authority may determine shall be incorporated.
- (2) After a subdivision plan has been approved the Authority shall not permit construction of a building on any of the plot under section-16 unless the owners have laid down and made street or streets and provided amenities as approved or transferred the land covered by roads, open spaces or other public purposes to the concerned local body.
- (3) Subdivision of land for residential purpose in green-belt use zone shall not be permitted unless such sub-division in the opinion of the Authority forms a part of the normal expansion of existing human habitation.
- (4) The sub division shall conform to the proposals of the CDP and other development plans.

Size of the plot and road width

**72.** (1) No sub divided plot will be less than 50sq.m. However the Authority reserves the right to relax in special cases such as EWS housing. The size of the plot shall be according to the relevant sub-division of plot size in the zones.

TABLE-14: MINIMUM ROAD WIDTHS FOR RESIDENTIAL SUBDIVISION

Sl.No.	Length of road in (m)	Min. width of road
1	Up to 250	9.0
2	Above 250 up to 500	12.0
3	Above 500 to 1000	15.0

• For EWS housing scheme, the minimum road width may be relaxed.

Area for development

73. Apart from the provision for amenities, open spaces, the area for residential development shall be up to maximum of 50% of the total land area.

# Parks and open spaces

**74.** Parks and open spaces shall not be less than 10% of the total land area. This shall be relinquished to the Authority and if required, the Authority may handover area over for maintenance to the residents' welfare association or owner or developer. If the site is not utilized for which it is leased out within a prescribed period, it will be resumed back to the Authority.

# Civic amenities

75. Civic amenities space shall not be less than 5% of the total area. The site shall be relinquished to Authority and leased to the residents' welfare association or the developer on payment of necessary nominal fees as prescribed by the Authority from time to time. If the site is not utilized for which it is leased out within a prescribed period, it will be resumed back to the Authority.

### Exemptions

- **76.** (1) In case of developable area for residential development is less than 50% by providing for Master Plan roads or any other road or due to statutory reasons, prescribed by the Authority in a layout, the applicant may be exempted from complying with Civic amenities reservation.
  - (2)For layout over 10.0 ha, commercial land uses such as Business offices, shopping complexes and Retail up to 2-3% may be permitted, subject to provision of separate access.
  - (3) For residential development upto 0.30 hectare of land, the requirement of open space may not be insisted on.

# Security deposit for sub-division plan

- 77. (1) The applicant shall deposit a refundable non earning security deposit at the rate of Rs.100/- per Sq. m. of plot area for development of land for a plotted development scheme.
  - (2) The security deposits shall be refunded within 60 days from the date on which completion certificate is produced. If the development is not as per approved plan, this deposit shall be forfeited and the amount will be transferred to the local authority for development of the site.
  - (3) The security deposit will be refunded with 2% interest if the development is carried out as per the approved plan / lay out.
  - (4) The applicant may deposit the security fee in the form of Bank Guarantee.

#### PART - IX

#### **COMPOUNDING**

# Restriction on

- Compounding 78. (1) Any deviation pertaining to unauthorized development shall not be compounded;
  - **A.** Where construction has been undertaken on Government land or land belonging to local body or land not owned by the person undertaking such development;
  - **B.** Where FAR or height has been exceeded or front setback has been reduced from the prescribed norms under these regulations.
  - **C.** Where development has been undertaken unauthorizedly within the prohibited limits of any ancient or archaeological monuments.
  - **D.** Where such developments interfere with the natural drainage of the locality;
  - **E.** Where development has been undertaken unauthorisedly over the area earmarked /approved for parking; and,
  - **F.** Where road or drain whether public or private, whether constructed or natural, has been encroached.
  - (2) Subject to the provisions contained in sub regulation (1), the Authority shall have the power to determine such other circumstances under which compounding may be prohibited.
  - (3) The Authority may, either before or after the institution of the proceedings under the provisions of the Act compound any offence:
    - **A.** Where development has been undertaken without permission, but within the framework of use restrictions and the provisions of these regulations applicable to the concerned plot;
    - **B.** Where development has been undertaken in deviation of the approved plan, but within the framework of the use restriction and the provisions, norms, and stipulations of these regulations; and
    - **C.** The Authority may however compound deviations up to 10% (ten percent) beyond the permissible norms of these regulations in respect of coverage, rear and side setback only.

# Compounding Rate

**79.** Compounding Rates for various categories shall be as follows;

TABLE – 15: CATEGORY WISE COMPOUNDING RATES

Sl.	Situations	Compounding fee for so	ı.ft. (in Rs.)
No.	Situations	Residential/Institutional	Others
1.	Where development has been undertaken without permission, but within the frame work of use restrictions and the provisions of the Regulations applicable to concerned plot	10	25
2.	Where development has been undertaken in deviation to the approved plan, but within the framework of use, restrictions and the provisions of norms and stipulations of these regulations.	25	40
3.	Constructions up to 10% beyond the permissible norms of these Regulations with respect to coverage, side and rear setback.	50	100

# Compounding amount

**80.** At least 50% of the compounding amount shall be utilized for development of public utility services and protection of heritage sites and structures.

# Temporary retention

**81.** The Authority may allow retention of any unauthorized structure for temporary period on deposit of retention fee. The type of structure to be retained, the period of retention and the fees to be deposited shall be decided by the Authority from time to time.

#### PART – X

#### SAVINGS / REPEALS AND INTERPRETATION

# Repeal and 82. Savings

- (1) The Bhubaneswar Development Authority (Planning and Building Standards) Regulations 2001 are hereby repealed.
- (2) Notwithstanding such repeal, anything done or any action taken under the regulations so repealed shall be deemed to have been done or taken under these regulations;.

# Interim Development Plans

- 83. (1) The Authority may prepare Interim Development Plans (IDP) for newly included development areas including stitiban/ ryoti land within a reasonable time frame so that development may not be held up in the name of pendency of Interim Development Plan. Where such IDP has not been prepared, the general provisions of this Regulation shall apply without any zonal restrictions.
  - (2) The Authority shall ensure that resources for land acquisition and cost of land are mobilised or are likely to be mobilised within the time frame projected for implementation of such Interim Development Plans.

# Applicabil ity of National Building Code

**84.** Where no express provision has been made in respect of any matter connected with planning and building standards by the Act, the Rules, the Development Plan, the Town Planning Schemes, or these Regulations or by any resolution of the Authority, the provisions of the National Building Code of India, 2005 shall *mutatis mutandis* be applicable.

# Schedules and annexures

- **85.** (1) As regards qualification, experience and competence of technical personnel and Builders the references of which are given in annexure-I may be followed
  - (2) The extract of ODA Act 1982, ODA rules 1983 and relevant provisions of National Building Code which are provided in annexure-II may be referred to.
  - (3) The application for permission under sub section-1 of section 16, order granting permission under sub-section(3) of Section 16, drawing attention of the Vice-Chairman under sub section (7) of section 16, maintenance of registers under sub section(4) of section 16 and (12) of the Act, notice for commencement of work, completion certificate, certificate for execution of work, certificate for structural stability, periodical progress report, of the Act, occupancy certificate Indemnity bond for basement, intimation regarding approval of residential building plan are provided in form I to XII of these regulations.

# Applicability of Regulations' 2001

- **86.(1)** The Scheme for regularization of unauthorized/deviated constructions through compounding notified under clause-72 (2) of the BDA (Planning and Building Standards) Regulations'2001(amended) and subsequent modification shall remain operational as per the provisions of the Scheme.
  - (2) If any Department of Government/Statutory Authority has given any commitment for a project under PPP under the provision of BDA (P & B.S.)Regulations,2001 with the prior approval of Government, but the building plan of such project has not yet been approved by the Authority as on date of enforcement of these Regulations, such commitment shall be treated to be made under these Regulations.

# Decision of the Government to be final

**87.** In case of any dispute in interpretation of these regulations, the decision of the State Government shall be final.

# Relaxation by the Govt.

88. The Authority may recommend to the Government for relaxation/modification of any of the clauses of these Regulations in the general interest of the public pertaining to projects/schemes developed by the Govt. agencies and the decision of the Government in this regard shall be final.

#### **ANNEXURE-I**

# QUALIFICATION, EXPERIENCE & COMPETENCE OF TECHNICAL PERSONNEL AND BUILDER

#### 1. ARCHITECT

#### A) Qualification & Experience

The minimum-qualification for an Architect shall be Degree in Architecture/ equivalent, registration with the Council of Architecture and not be in arrears of subscription.

#### **B)** Competence

The Architect shall be competent to carry out the work related to the building permit as given below and shall be entitled to submit:

- i) All plans and information connected with the building permit except engineering services of multistoried/special buildings given in 12.2.5.1 of NBC, 2005.
- ii) Certificate of supervision and completion of all buildings pertaining to architectural aspects.
- iii) Preparation of sub-division/layout plans and related information connected with development permit of area upto 2 hectare.
- iv) Certificate of supervision for development of land of area up to 2 hectare.

## C) Duties & Responsabilités

- i) She/ He shall be responsible for making adequate arrangements to ensure not only that the work is executed as per the approved plans but also in conformity with the stipulations of the National Building Code, 2005 and the BIS standards for safe and sound construction non-hazardous, functioning of the services incorporated in the building and for making adequate provisions for services and equipment for protection from the fire hazards as per the stipulations of the National Building Code, 2005 in the buildings and shall obtain N.O.C. from the Chief Fire Officer or concerned Authority/ before applying for occupation certificate.
- ii) He/She shall, on behalf of the owner, apply for the progress certificates completion certificates and the occupancy certificates and obtain the same as required under the regulations.

#### 2. ENGINEER

#### A) Qualification and Experience

The minimum qualification for an Engineer shall be Degree in Civil Engineering/ equivalent, registration with the Institution of Engineers, India and not be in arrears of subscription.

## **B)** Competence

The Licensed Engineers shall be competent to carry out the work related to the building permit as given below and shall be entitled to submit:

- i) All plans and information connected with building permit.
- ii) Structural details and calculations of buildings on plot up to 500 square meters and up to five storeys excluding basement/stilt or below 15 meter in height.
- iii) Certificate of supervision and completion for all buildings.
- iv) Preparation of all service plans and related information.
- v) Issuing certificate of supervision for development of land for all area.

#### C) Duties & Responsibilities

- i) She/ He shall be responsible for making adequate provisions as per the approved plans but also is inconformity with the stipulations of the National Building Code 2005 and the BIS standards for safe and sound construction non-hazardous, functioning of the services incorporated in the building and for making adequate provisions for services and equipment for protection from the fire hazards as per the stipulations of the National Building Code of India in the buildings and shall obtain N.O.C. from the Chief Fire Officer or concerned Authority/ before applying for occupation certificate.
- ii) She or He shall, on behalf of the owner, apply for the progress certificates completion certificates and the occupancy certificates and obtain the same as required under the regulations.

# D) Registration

- i) The registration fees if any shall be payable as prescribed by the Authority from time to time.
- ii) If he/she is found negligent in his/her duties and responsibilities. The Authority may black-list an Engineer in case of serious defaults or repeated defaults and shall inform the Institution of Engineers, India to take suitable action against such person. The registration shall be

liable to be revoked temporarily or permanently by the Authority in such cases of negligence and default.

#### 3. STRUCTURAL ENGINEER

### A) Qualification & Experience

The minimum qualifications for a structural engineer shall be degree in Civil Engineering/ equivalent, registration with the Institution of Engineers, India and not be in arrears of subscription with minimum 2 years experience in structural engineering practice.

**Note** – The 2 years experience shall be relaxed to one year in the case of Post Graduate degree in Structural Engineering/ higher qualification.

#### **B)** Competence

The licensed structural Engineers shall be competent to submit the structural details and calculations for all buildings and undertake supervision.

In case of buildings having special structural features, as decided by the Authority, which are within the horizontal areas and vertical limits specified in chapter A-2.1.1(b), A-2.2.1(b) and A-2.4.1(a) of NBC 2005 they shall be designed only by structural engineers.

#### C) Duties and Responsibilities

- i) To prepare a report of the structural design.
- ii) To prepare detailed structural design and to prescribe the method and technique of its execution strictly on the basis of the National Building Code or relevant BIS specifications.
- iii) To prepare detailed structural drawings and specifications for execution indicating thereon, design live loads, safe soil bearing capacity, specifications of material, assumptions made in design, special precautions to be taken by contractor to suit the design assumptions etc. whatever applicable.
- iv) To supply copies of structural drawings to the site supervisor.
- v) To inspect the works at all important stages and certify that the work being executed is up to the satisfaction of the Architect.
- vi) To certify the structural safety and overall structural soundness of the building to the Architect.
- vii) To advise the Owner/Architect/Engineer for arranging for tests and their reports for soil, building material etc. for his evaluation and design consideration.

- viii) To prepare the revised calculations & drawings in case of any revision with reference to the earlier submission of drawing and design in a particular case.
- ix) To submit the certificate of structural safety and over all structural soundness of building to Authority.
- x) In case of multistoried buildings and buildings of a special nature as identified by the Authority from time to time, the Structural Calculations/ Drawings shall be got vetted by Indian Institute of Technology/National Institute of Technology / Reputed Government Engineering College.

## D) Registration

- i) The registration fees if any shall be payable as prescribed by the Authority from time to time.
- ii) If he/she is found negligent in his/her duties and responsibilities. The Authority may black-list a Structural Engineer in case of serious defaults or repeated defaults and shall inform the Institution of Engineers, India to take suitable action against such person. The registration shall be liable to be revoked temporarily or permanently by the Authority in such cases of negligence and default

#### 4. TOWN PLANNER

### A) Qualification & Experience

The minimum qualification for a town planner shall be recognized Post Graduate Degree/ Diploma in Town Planning/ Undergraduate Degree in Town Planning and registered membership of ITPI and not be in arrears of subscription.

#### **B)** Competence

The licensed town planner shall be entitled to submit:

- i) All plans and related information connected with development of land of all areas including integrated township.
- ii) Certificate of supervision for development of land of all areas.

### C) Duties and Responsibilities

He/Shall be responsible for making adequate arrangements to ensure not only that the work is executed as per the approved plans but also is conformity with the stipulations of the National Building Code, 2005 and the BIS standards for safe and sound construction non-hazardous, functioning of the services incorporated in the building and for making adequate provisions for services and equipment for protection from the fire hazards as per the stipulations of the National Building Code of India 2005.

## D) Registration

- i) The registration fee if any shall be payable as prescribed by the Authority from time to time.
- ii) The Authority may black list a Town Planner in case of serious defaults or repeated defaults and shall inform the Institute of Town planners, India. The registration shall be liable to be revoked temporarily or permanently by the Authority in such case of negligence or default.

#### 5. SUPERVISOR

#### A) Qualification and Experience

The minimum qualifications for a supervisor shall be recognized Diploma in Civil Engineering or Architectural Assistantship, plus 5 years experience in building design, construction and supervision.

#### **B)** Competence

The licensed supervisor shall be entitled to submit:

- i) All plans and related information connected with building permit for residential buildings on plot up to 100 sq. m. and up to two storeys.
- ii) Certificate of supervision for buildings as per (i).

#### C) Duties and Responsibilities

- i) To adhere strictly to the architectural and structural drawings/ specifications and written instructions of the structural Engineer and Architect/ Engineer.
- ii) To follow the provisions of NBC, 2005 or BIS specifications as regards materials, components, quality control and the process of construction.
- iii) To bring to the notice of the structural Engineer and Architect/Engineer/any situation or circumstances which in his opinion are liable to endanger the safety of structure.
- iv) To deposit with the Authority one set of working drawings of the works executed along with the progress certificates before proceeding to the next stage of the work.
- v) He shall be in charge of site and responsible for supervision of the work.
- vi) He shall ensure that all the works under his charge are carried out in conformity with the approved drawings and as per the details and specifications supplied by the Architect/Engineer.

- vii) He shall take adequate measures to ensure that no damage is caused to the work under construction and the adjoining properties.
- viii) He shall also ensure that no undue inconvenience is caused in the course of his work in the people in neighbourhood.

#### D) Registration

- i) The registration fees if any shall be payable as prescribed by the Authority from time to time.
- ii) If he/she is found negligent in his/her duties and responsibilities. The Authority may blacklist supervisor in case of serious defaults or repeated defaults. The registration shall be liable to be revoked temporarily or permanently by the Authority in such cases of negligence and default

## 6. GROUP AGENCY

- (1) When any Group or Agency comprising of qualified Architect/ Engineer/ Town Planner is practicing, then the qualifications and experience, competence, duties and responsibilities and registration will be the combination of individual qualification and experience, competence, duties & responsibilities and registration as provided in Schedule 1 to 5.
- (2) The Authority may also empanel public undertakings/agencies engaged in development work for quick execution of Government./Private projects within its jurisdiction.

#### 7. BUILDER

#### A) Qualification and experience

- a) The person/ firm engaged in construction activities/ building activities in an urban area having proven merit and experience may be considered for registration as a builder. He/ She should have at least five years experience in the line.
- b) A person or group of persons having a qualification of Civil Engineering, Architecture and Town Planning may be registered as builder.
- c) The Authority may classify the builders into three classes namely, Class-A, Class-B and Class-C considering their experience, expertise and annual turnover.

### B) Duties and Responsibilities of Builders

i) He/She shall appoint a qualified Architect/ Engineer/ Town Planner to prepare plans, designs, drawings and specifications for execution of the works in accordance with the requirements of these regulations.

- ii) He shall not cause or allow any deviations from the approved drawings in the course of the execution of the project and shall bear responsibility for any irregularity committed in the use and function of the building or its parts for which the approval has been obtained.
- iii) He shall not commence the use of building or shall not give the possession to occupy the building to any one before obtaining the occupancy certificate from the Authority.
- iv) He shall provide adequate safety measures for structural stability and protection against fire hazards likely from installation of services like electrical installation, plumbing, drainage, sanitation, water supply etc. wherever required under the regulations.
- v) He shall explain the construction / design and its intended use as per approved plan, to the prospective purchaser of the premises under construction.

### C) REGISTRATION

- i) The builders shall have to be registered with the Authority on payment of such fees as decided by the Authority from time to time.
- ii) The Authority may debar or black list the builder as referred to in the Regulations.

#### **ANNEXURE-II**

#### **EXTRACT FROM ODA ACT, 1982**

#### **Definitions:**

- I. "Agriculture" includes horticulture, poultry farming, the raising of crops, fruits, vegetables, flowers, grass or trees of any kind breeding of live-stock including cattle, horses, donkeys, mules, pigs, breeding of fish and keeping of bees and the use of land or grazing cattle or for and purpose which is ancillary to the farming of land or for any other agricultural purpose, but does not include the use of land as a garden which is an appendage to a building and the expression "agriculture" shall be construed accordingly;
- II. "Amenity" includes roads, water and electric supply, open spaces, parks, recreational grounds, cultural centres, natural features, playground, street lighting, drainage, sewerage, city beautification and such other utilities, services and conveniences as the State Government may determine to be an amenity, from time to time, for the purpose of this Act.
- III. "Area of bad lay-out or obsolete development" means an area consisting of land which is badly laid out or of obsolete development not conforming to the planning or the building regulations framed under this Act together with land contiguous or adjacent thereto and defined as such in the development plan;
- IV. "Authority" means a Development Authority constituted under sub-section (3) of Section 3 for a development area under this Act.;
- V. "Building" includes any structure or erection or part of a structure or erection which is intended to be used for residential, commercial, industrial, or other purposes, whether in actual use or not;
- VI. "Building operations" includes re-building operations, structural alterations of or additions to buildings and other operations normally undertaken in connection with the construction of buildings;
- VII. "Chairman" means the Chairman of the Authority;
- VIII. "Commerce" means the carrying on of any trade, business or profession, sale of exchange of goods of any type whatsoever and includes the running of with a view to making profit,hospitals,nursing homes, infirmaries or educational institutions, and also includes the running of sarais, hotels, restaurants and of boarding houses not attached to any educational institution and the word "commerce" shall be construed accordingly;
  - IX. "Commercial use" includes the use of any land or building or any part thereof for purpose of commerce or for storage of goods, or as an office, whether attached to any industry or otherwise;
  - X. "Development" with its grammatical variations means the carrying out or building, engineering, mining or other operations in, on, over or under land or the making of any material change, in any building or land or in the use of any building or land, and includes re-developments and re-constructions and lay-out and sub-division of any land and "to develop" shall be construed accordingly.;
  - XI. "Development area" means the area or group of areas declared as development area under sub-section(1) of Section 3;

- XII. "Director" means the person appointed as Director of Town Planning, Orissa under sub section(1) of Section 3 of Orissa Town Planning and Improvement Trust Act, Orissa Act 10 of 1957;
- XIII. "Engineering Operation" includes the formation or laying out of a street or means of access to a road or the laying out of means of water-supply,drainage,electricity,gas or of; other public utility service;
- XIV. "Existing land-use" means the predominant purpose for which any land or building was being used on a specified date;
- XV. "Final plot" means a plot reconstituted from an original plot and allotted in a town planning scheme as a final plot;
- XVI. "highway" has the same meaning as in Section 4 of the National Highways Act 1956 (Act 48 of 1956);
- XVII. "Industry" includes the carrying on of any manufacturing process as defined in the Factories Act,1948(Act 63 of 1948) and the word "industrial" shall be construed accordingly;
- XVIII. "Industrial use" means the use of any land or building or part thereof for purpose of industry;
  - XIX. "Land" includes benefit to arise out of land and things attached to the earth or permanently fastened to anything attached to the earth;
  - XX. "Local Newspaper" means any newspaper printed and published within the State of Orissa;
  - XXI. "Means of access" includes any means of passage whether private or public for vehicles or for pedestrians and includes any street;
- XXII. "National Highway" means any highway declared to be a national highway under section 2 of the National Highways Act, 1956 (Act 48 of 1956);
- XXIII. "Notification" means a notification published in the Gazettee;
- XXIV. "Occupier" includes-
  - (a) a tenant,
  - (b) an owner in occupation of, or otherwise using his land,
  - (c) a rent-free tenant of any land,
  - (d) a licensee in occupation of any land, and
  - (e) any person who is liable to the owner for consideration including damages for the use and occupation of the land;
  - XXV. "Operational construction" means any construction whether temporary or permanent, which is necessary for the operation, maintenance development or execution of any of the following services namely;
    - (a) railways,
    - (b) national highways
    - (c) national waterways,
    - (d) airways and aerodromes,
    - (e) posts and telegraphs, telephones, ,broadcasting and other like forms of communications,
    - (f) regional grid for electricity,
    - (g) any other service which the State Government may, if it is of opinion that the operation, maintenance, development or execution of such service is essential to the life of the community, by notification declare to be a service for the purpose of this clause;

Explanation- For the removal of doubts, it is hereby declared that the construction of-

(i)new residential buildings(other than gate, lodges, quarters, for limited essential operational staff and the like), roads and drains in railway colonies, hotels, clubs, institutes and schools, in the case of railways, and

(ii) a new building, new structure or new installation, or any extension thereof, in the case of any other service, shall not be deemed to be operational construction within the meaning of this clause;

XXVI. "Owner" includes a mortgagee in possession, a person who for the time being, is receiving or is entitled to receive or has received, the rent or premium or any other consideration for any land whether on his own account or on account of, or on behalf of or for the benefit of any other person or who would so receive the rent or premium or any other consideration or be entitled to receive the rent or premium or any other consideration if the land were let out to a tenant and includes the Head of a Government Department, General Manager of a Railway, the Secretary or other Principal Officer of a vocal authority, statutory authority or company in respect of properties under their respective controls;

XXVII. "Private Street" means any street, road, square, court, alley, passage or riding path, which is not a public street but does not include a pathway made by the owner or premises on his own land to secure access to or for the convenient use of such premises;

XXVIII. "Public building" means any building to which the public or any class or section of the public are granted access or any building, which is open to the public or any class or section of the public and includes any building

(a) Used as a -

- (i) school or college or a University or other educational institutions;
- (ii) hostel,
- (iii) library,
- (iv) hospital, nursing home, dispensary, clinic, maternity centre or any other like institution,
- (v) club,
- (vi) lodging house,
- (vii) court
- (viii) coffee house, boarding house, hotel or eating house,
- (b) Ordinarily used by the -
  - (i) Central or any State Government or any local authority or anybody, corporate, owned or controlled by the Central or any State Government, or
  - (ii) Public or any class or section of the public for religious worship or for religious congregation;
- XXIX. "Public open space" means any land, whether enclosed or not, belonging to the Central or any State Government or any local authority or anybody corporate

- owned or controlled by the Central or any State Government on which there is no building or of which not more than one twentieth part is covered with buildings and the whole or remainder of which is used for purpose of recreation or as open space;
- XXX. "Public place" means any place or building which is open to the use and enjoyment of public whether it is actually used or enjoyed by the public or not, and whether the entry is regulated by any entry fee or not;
- XXXI. "Public street" means any street, road, square, court, alley, passage or riding path over which the public have a right to way, whether a thoroughfare or not, and includes-
  - (a) the roadway over any public bridge or causeway,
  - (b) the footway attached to any such street, public bridge or causeway, and
  - (c) the drains attached to any such street, public bridge or causeway and the land, whether covered or not by any pavement, verandah or other structure, which lies on either side of the roadway up to the boundaries of the adjacent property whether that property is private property or property belonging to the Central or any State Government;
- XXXII. "Railway" means a railway defined in the Indian Railway Act,1890 (Act 9 of 1890);
- XXXIII. "Reconstituted plot" means a plot which is in any way altered by the making of a town planning scheme;
  - **Explanation-** For the purposes of this clause" altered" includes the alteration of ownership of plot.
- XXXIV. "Regulation" means a regulation made under section 124 and includes zoning and other regulations made as a part of a development plan;
- XXXV. "Residence" includes the use for human habitation of any land or building or part thereof including gardens, grounds, garage, stables and out-houses, if any, appurtenant to such building and "residential' shall be construed accordingly;
- XXXVI. "Rule" means a rule made under this Act by the State Government;
- XXXVII. "Slum area" means any predominantly residential area, where the dwellings which, by reasons of dilapidation, overcrowding, faulty arrangements or design, lack of ventilation, light or sanitary facilities or any combination of these factors, are detrimental to safety and health of the inhabitants or others and which is defined by development plan as a slum area;
- XXXVIII. "To correct" in relation to any building includes-
  - (a) any material alteration or enlargement of any building,
  - (b) the conversion by structural alteration of place for human habitation of any building not originally constructed for human habitation,
  - (c) the conversion into more than one place for human habitation of a building originally constructed as one such place,

- (d) the conversion of two or more places of human habitation into a greater number of such places,
- (e) such alterations of a building as affects an alteration of its drainage or sanitary arrangement or materially affects its security,
- (f) the addition or any rooms, buildings, houses or other structures to any building, and
- (g) the construction in a wall adjoining any street or land not belonging to the owner of the wall, or a door opening on to such street or land;
- XXXIX. "Tribunal" means the Tribunal constituted under section 87;
- XL. "Unauthorized occupation" in relation to any premises means the occupation by any person of the premises belonging to the Authority, without any authority, for such occupation and includes the continuance of this occupation by any person of the premises after the Authority (whether by way of grant or any other mode of transfer under which he was allowed to occupy the premises) has expired or has been determined for any reasons whatsoever;
- XLI. "Urban local body" means a Municipal Council or a Notified Area Council constituted under the Orissa Municipal Act,1950(Orissa Act 23 of 1950)
- XLII. "Valuation Officer" means the Valuation Officer appointed under section 33 of this Act,
- XLIII. "Zone" means any one of the divisions into which a development area may be divided for the purpose of development under this Act;
- XLIV. Words and expressions used in this Act but not defined shall have the same meaning as assigned to them in the Orissa Municipal Act,1950 (Orissa Act 23 of 1950) as amended from time to time.

#### **ANNEXURE-III**

#### EXTRACT FROM ODA RULES 1983

#### (1) **Definitions:**

- (i) "Act" means the Orissa Development Authorities Act, 1982,
- (ii) "Architect Member" means Urban Designer or Architect-member appointed under clause (f) of sub-section (5) of section-3;
- "Board" means the Board of Enquiry appointed under Rule 13;
- (iii) "Engineer Member" means the Engineer Member appointed under clause (C) of sub-section (5) of section 3;
- (iv) "Finance Member" means the Finance and Accounts member appointed under clause (d) of sub-section(5) of section 3;
- (v) "Form" means a Form appended to these rules;
- (vi) "Gazette" means the Official Gazette of the State of Orissa;
- (vii) "Member" means a member of the Authority;
- (viii) "Planning Member" means the Town and Regional Planning Member appointed under clause (e) of sub-section (5) of section 3;
- (ix) "Registered Contractor" means a contractor registered under Rule-67;
- (x) "Section" means a section of the Act;
- Words and expressions used, but not defined in these rules shall have the same meaning as respectively assigned to them in the Act.

#### **ANNEXURE-IV**

# EXTRACT FROM NATIONAL BUILDING CODE OF INDIA, 2005

#### 1. **Definitions**

**Accessory use** - Any use of the premises subordinate to the principal use and customarily incidental to the principal use

**Alteration** - A change from one type of occupancy to another, or a structural change, such as an addition to the area or height, or the removal of part of a building, or any change to the structure, such as the construction of cutting into or removal of any wall, partition, column, beam, joist, floor or other support, or a change to or closing of any required means of ingress or egress or a change to the fixtures or equipment.

**Approved** - Approved by the Authority having jurisdiction

**Building Height of** - The vertical distance measured, in the case of flat roofs from the average level of the ground around and contiguous to the building or as decided by the Authority to the terrace of last livable floor of the building adjacent to the external walls; 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 gables facing the road, the midpoint between the eaves level and the ridge. Architectural features serving no other function except that of decoration shall be excluded for the purpose of measuring heights.

**Building line** - The line up to which the plinth of a building adjoining a street or an extension of a street or on a future street may lawfully extend. It includes the lines prescribed, if any, in any scheme. The building line may change from time to time as decided by the Authority.

Conversion- The change of occupancy or premises to any occupancy or use requiring additional occupancy permit.

**Drain** - A conduit or channel for the carriage or storm water, sewage, waste water or other water-borne wastes in a building drainage system.

**Drainage** - The removal of any liquid by a system constructed for the purpose.

**Occupancy or use group** - The principal occupancy for which a building or a part of a building is used or intended to be used; for the purpose of classification of a building according to occupancy, an occupancy shall be deemed to include the subsidiary occupancies which are contingent upon it.

Occupier - Occupier includes any person for the time being, paying or liable to pay rent or any portion of rent of the building in respect of which it is used, or compensation or premium on account of the occupation of such building and also a rent free tenant, but does not include a lodger, and the words 'occupy' and 'occupation' do not refer to the lodger. An owner living in or otherwise using his own building shall be deemed to be the occupier thereof.

Operational construction/Installation- A construction/ installation put up by Government Departments for operational purposes

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

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

**Permit** - A permission or authorization in writing by the Authority to carry out work regulated by the code.

Registered Architect, Engineer, Structural Engineer, Supervisor, Town Planner, Landscape Architect, Urban Designer - qualified architect, engineer, structural engineer, supervisor, town planner, landscape architect or urban designer who has been registered by the Authority or by the body governing such profession and constituted under a statute, as may be applicable. The registration requirements of these professionals shall be as given in Annexure – A.

#### Notes -

- 1. Unless specified otherwise, the word 'engineer' shall mean 'civil engineer' or 'Architectural Engineer'
- 2. The work 'licensing/licensed etc, if used by the Authority in the above context shall be deemed to mean 'registration/registered' / empanelment etc.
- 2.15 Road- See 2.25
- 2.16 Road line- See 2.27
- 2.17 Room Height The vertical distance measured from the finished floor surface to the finished ceiling surface. Where a finished ceiling is not provided, the underside of the joists or beams or tie beams shall determine the upper point of measurement for determining the head room.
- 2.18 Sanctioned plan The set of plans and specifications submitted in connection with a building or development and duly approved and sanctioned by the Authority.
- 2.19 Service road A road/ lane provided at the rear or side of a plot for service purposes.
- 2.20 Set back line A line usually parallel to the plot boundaries and laid down in each case by the Authority, beyond which nothing can be constructed towards the site boundaries.
- 2.21 Site (plot) A parcel (piece) of land enclosed by definite boundaries
- 2.22 Street level or Grade- 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-point
- 2.23 Street line The line defining the side limits of a street
- 2.24 Unsafe Building- Buildings which are structurally and constructionally unsafe or insanitary or not provided with adequate means of egress or which constitute a fire hazard or are otherwise dangerous to human life or which in relation to existing use constitute a hazard to safety or health or public welfare, by reason of inadequate maintenance, dilapidation or abandonment.

### 2. Regulations for Ventilation shaft.

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

Height of buildings in Meter	Size of ventilation shaft in Square Meter	Minimum dimension of one side of the shaft in Meter
Upto 10	1.2	0.9
Upto 12	2.8	1.2
Upto 18	4.0	1.5
Upto 24	5.4	1.8
Upto 30	8.0	2.4
Above 30	9.0	3.0

# 3. **Regulations for Life Safety**

Every building shall be so constructed, equipped, maintained and operated as to avoid undue danger to the life and safety of the occupants from fire, smoke, fumes or panic during the time period necessary for escape.

For general exit requirements, occupant load ,capacities of exits ,arrangements of exits, number of exits, doorways, corridors and passage ways ,internal stair case, external stair case, horizontal exits, fire towers, ramps, fire lifts, emergency and escape lighting, illumination of means of exit and fire detection and warning, the relevant provisions in clause-4, part-4 or NBC, 2005 shall be referred.

## 4. Requirements of parts of Building

Every parts of the building and other building related activities shall be planned and designed in accordance with the clause-12, part-3 of NBC, 2005.

#### 5. Fire Safety Requirements

Building shall be so planned, designed and constructed so as to ensure fire safety and this shall be done in accordance with the part-4, Fire and Life Safety of the National Building Code of India 2005.

#### 6. **Structural Design**

The structural design of any item of masonry, timber, plain and reinforced concrete and steel in a building shall be carried out in accordance with part-6, Structural Design of NBC.

#### 7. Quality of Material and Workmanship

All materials and workmanship shall be of good quality conforming generally to accepted standards of Public Works Department of Orissa, BIS Specifications and codes as included in part-5 Building materials and Part-7 Constructional Practices and Safety of National Building Code of India, 2005.

#### 8. Building Services

The Planning design and installation of electrical installations, air-conditioning and heating work, installation of lifts and escalators in a building shall be carried out in accordance with part-8 (Building Services) of National Building Code of India 2005

## 9. Water supply requirements

The requirements of water supply in a building shall be accordance with the provision of National Building Code, 2005 as amended from time to time.

## 10. Structural Safety for Natural Hazard Protection

For building more than three storeys (including ground floor) or more than 12.0 meter height and important facilities like water works, overhead tank, telephone exchange, bridges and culverts, electric substation, transmission towers, the requirements specified in the BIS Code and Guidelines and other documents shall be observed for structural safety and natural hazards protection of buildings.

#### 11. Civic Amenities

In group housing, residential lay-outs and Integrated Townships, the civic amenities shall be provided as specified in clause-5.5., part-3 of National Building Code of India, 2005.

#### **ANNEXURE-V**

# STANDARDS FOR WATER, SANAITARY AND FIRE SAFETY REQUIRMENTS

# 1. PER CAPITA WATER REQUIREMENT FOR VARIOUS OCCUPANCIES / USES

Table-1

Sl. No.	Type of Occupancy	Consumption per Capita per day (in lt.)
1	Residential	
	a) In living units	135
	b) Hotels with lodging accommodation (per bed)	180
2	Educational	
	a) Day schools	45
	b) Boarding Schools	135
3	Institutional (Medical Hospitals)	
	a) No. of beds not exceeding 100	340
	b) No. of beds exceeding 100	450
	c) Medical quarters and hostels	135
4	Assembly- Cinema theatres, auditoria, etc. (per seat	15
	accommodation)	
5	Government or semi public business	45
6	Mercantile (Commercial)	
	a) Restaurants (per seat)	70
	b) Other business building	45
7	Industrial	
	a) Factories where bath-rooms are to be provided	45
	b) Factories where bath-rooms are not to be	30
	provided	
8	Storage (including Warehouses)	30
9	Hazardous	30
10	Intermediate Rail Stations (excluding mail and express	45(25)*
	stops).	
11	Junction Station	70(45)*
12	Terminal Stations	45
13	International and Domestic Airports	70

<sup>\*</sup> The values in parenthesis are for such stations, where bathing facilities are not provided.

**Note:** The number of persons for Sl. No. 10 to 13 shall be determined by the average number of passenger handled by the station daily with due consideration given to the use the facilities.

Table-2
FLUSHING STORAGE CAPACITIES

Sl. No.	Classification of Building	Storage Capacity
1.	For tenements having common	900 lt. net per w.c. seat
	conveniences	
2.	For residential premises other than	2701 lt. net for one w.c.
	tenements having common conveniences	seat each and 180 lt.
		for each additional seat.
3.	For factories and workshops	900 lt. per w.c. seat and
		180 lt. per urinal.
4.	For cinemas, public assembly hall, etc.	900 lt. per w.c. seat and
		350 lt. per urinal.

Table-3

DOMESTIC STORAGE CAPACITIES

Sl.	No. of Floors	Storage	Capacity	Remarks
No.			_ •	
For p	premise occupied tenem	ents with com	mon convenie	ences:
1.	Ground floor	Nil		Provided down take
				fittings are installed
2.	Floors 2, 3,4, 5 and upper	500 litre pe	r tenement	
	floors			
For p	premises occupied as fla	ts or blocks		
1.	Ground floor	Nil		Provided down take fittings are installed
2.	Floors 2, 3, 4, 5 and upper floors	500 litre pe	r tenement	-

**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 other floors.

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 calculated on the number of down take fittings according to scale given below:

Down take taps 70 lt. each

Showers 135 lt. each Bathtubs 200 lt. each

# 2. SANITATION REQUIREMENTS FOR VARIOUS OCCUPANCIES.

Table-4
SHOPS AND COMMERCIAL OFFICES

Sl.	Sanitary Unit / Fittings	For Personnel
No.		
1.	Water closet	One for every 25 persons or part thereof exceeding 15 (including employees and customers). For female personnel 1 for every 15 persons or part thereof exceeding 10.
2.	Drinking Water Fountain	One for every 100 person with a minimum of one on each floor.
3.	Wash Basin	One for every 25 persons or part thereof.
4.	Urinals	Same as Sl. No. 3 of Table 27
5.	Cleaners' Sink	One per floor minimum, preferably in or adjacent to sanitary rooms.

**Note:** Number of customers for the purpose of the above calculation shall be the average number of persons in the premises for a time interval of one hour during the peak period. For male-female calculation a ratio of 1: 1 may be assumed.

Table-5
SANITARY REQUIREMENTS FOR HOTELS

Sl.	Sanitary	For Residential	For non residential	Staff
No.	Unit	staff	For male	For female
1.	Water Closet (W.C.)	One per 8 Persons omitting occupants of the attached water closet minimum of 2 if both sexes are lodged	1 for 1-15 persons 2 for 16-35 persons 3 for 36-65 persons 4 for 66-100 persons	1 for 1-12 persons 2 for 13-25 persons 3 for 26-40 persons 4 for 41-57 persons 5 for 58-77 persons 6 for 78-100 persons
2.	Ablution Taps	One in each W.C	One in each W.C	One in each W.C.
3.	Urinals	Nil	Nil upto 6 persons 1for 7-20 persons 2 for 21-45 persons 3 for 40-70 persons	Nil

			4 for 71-100 persons	
4.	Wash Basins	One per 10 persons omitting each basin installed in the room / suite	1 for 15 persons 2 for 16-35 persons 3 for 36-65 persons 4 for 66-100 persons	1 for 1-12 2 for 13-25 3 for 26-40 4 for 41-57 5 for 58-77 6 for 78-100
5.	Baths	One per 10 persons omitting occupants of room with bath in suite	Nil	Nil
6.	Slop Sinks	One per 30 Bed rooms (one per floor minimum)	Nil	Nil
7.	Kitchen Sink	One in each Kitchen	One in each Kitchen	One in each Kitchen

Table-6
FOR PUBLIC REST ROOMS

Sl. No.	Sanitary Unit	For Male	For Female
1.	Water Closet	One per 100 persons upto 400 persons; for over 400 add at the rate of one per 250 persons or part thereof.	Two for 10 persons upto 200 persons; over 200 add at the rate of one per 100 persons or part thereof.
2.	Ablution Taps	One in each W.C.	One in each W.C.
3.	Urinals	One for 50 persons or part thereof.	Nil, upto 6 persons 1 for 7-20 persons 2 for 21-45 persons 3 for 46-70 persons 4 for 71-100 persons
4.	Wash Basins	One per W.C. and urinal provided	One per W.C.
5.	Baths		
6.	Slop Sinks		
7.	Kitchen Sink	One in each Kitchen	One in each Kitchen

Note: i) It may be assumed that the two-thirds of the number are males and one-third females

*ii)* One water tap with drainage arrangements shall be provided for every 50 persons or part thereof in the vicinity of water closet and urinals.

Table-7
SANITATION REQUIREMENTS FOR EDUCATIONAL OCCUPANCY

Sl. No.	Sanitary Unit	<b>Boarding Institution</b>		Other Educa Institution	tional
		For Boys	For Girls	For Boys	For Girls
1.	Water Closet (W.C.)	One for every 8 pupils or part thereof	One for every 6 pupils or part thereof	One for 40 pupils or part thereof	One for every 25 pupils or part thereof
2.	Ablution Taps	One in each W.C.	One in each W.C.	One in each W.C.	One in each W.C.
3.	Urinals	One per every 25 pupils or part thereof		One per every 20 pupils or part thereof	
4.	Wash Basins	One for every 8 pupils or part thereof	One for every 6 pupils or part thereof	One for every 40 pupils or part thereof	One for every 40 pupils or part thereof
5.	Baths	One for every 8 pupils or part thereof	One for every 6 pupils or part thereof	One for 40 pupils or part thereof	One for every 25 pupils or part thereof
6.	Drinking Water Fountains	One for every 50 pupils or part thereof	One for every 50 pupils or part thereof	One for every 50 pupils or part thereof	One for every 50 pupils or part thereof
7.	Cleaners Sink	One per Floor minimum	One per Floor minimum	One per Floor minimum	One per Floor minimum

Table-8
SANITATION REQUIRMENTS FOR NURSERY SCHOOLS

Sl. No.	Sanitary Unit	Requirement
1.	Water Closet	One for every 15 pupils or part
		thereof
2.	Ablution Taps	One in each W.C.
3.	Urinals	
4.	Wash Basins	One for every 15 pupils or part
		thereof
5.	Baths	One bath sink per 40 pupils
6.	Drinking Water Fountains	One for every 50 pupils or part
		thereof
7.	Cleaners Sink	

*Note:* 

- 1. One water tap with draining arrangements shall be provided for every 50 persons or part thereof, in the vicinity of water closets and urinal.
- 1. For teaching staff, the schedule of sanitary units to be provided shall be the same as in case of office buildings (Table 27).

Table-9

SANITATION REQUIREMENTS FOR INSTITUTIONAL (MEDICAL)
OCCUPANCY-HOSPITAL

Sl. No.	Sanitary Unit	Hospitals With indoor Patient Ward	Hospitals With outdoor Patient Wards	
		For Males & females	For Males	For Females
1.	Water Closet (W.C.)	One for every 6 beds or part thereof	One for every 100 persons or part thereof	Two for every 100 persons or part thereof
2.	Ablution taps	One in each W.C.	One in each W.C.	One in each W.C.
3.	Wash Basins	Two upto 30 bed; add one for every additional 30 beds; or part thereof	One for every 100 persons or part thereof	One for every 100 persons or part thereof.
4.	Baths with Shower	One bath with shower for every 8 beds or part thereof.		
5.	Bed pan washing sink	One for each ward	-	
6.	Cleaner's Sinks	One for each ward	One per floor minimum	One per floor minimum
7.	Kitchen sinks	One for each ward		

	& dish Washers (where Kitchen is provided)		
8.	Urinals	 One for every 50 persons or part thereof	

Table-10 SANITATION REQUIREMENTS FOR ADMINISTRATIVE BUILDINGS

Sl. No.	Sanitary Unit	For Males	For Females
1.	Water Closet (W.C.)	One for every 25	One for every 15
		persons or part thereof	persons or part thereof
2.	Ablution Taps	One in each W.C.	One in each W.C.
3.	Wash Basins	One for every 25	One for every 25
		persons or part thereof	persons or part thereof
4.	Baths with Shower	One on each floor	One on each floor
5.	Bed pan washing sink		
6.	Cleaner's Sink	One per floor minimum	One per floor minimum
7.	Kitchen sinks & dish	One for each floor	One for each floor
	Washers (where Kitchen		
	is provided)		
8.	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%.	

Table-11
SANITATION REQUIREMENTS FOR INSTITUTIONAL (MEDICAL)
OCCUPANCY(STAFF QUARTERS AND HOSTELS)

Sl. No.	Sanitary Unit	<b>Doctor's Dormitories</b>		Nurses Hostel
		For Male Staff	For female staff	
1.	Water Closet	One for 4 persons	One for 4 persons	One for 4 persons or part thereof
2.	Ablution Taps	One in each W.C.	One in each W.C.	One in each W.C.
3.	Wash Basins	One for every 8 persons or part	One for every 8 persons or part	One for every 8 persons or part
		thereof	thereof	thereof
4.	Bath (with shower)	One for every 4 persons or part thereof	One for every 4 persons or part thereof	One for every 4 persons or part thereof
5.	Cleaner's Sink	One per floor minimum	One per floor minimum	One per floor minimum

Table-12
SANITATION REQUIREMENTS FOR GOVERNMENT AND PUBLIC BUSINESS OCCUPANCY AND OFFICES

Sl. No.	Sanitary Unit	For Male Personnel	For female Personnel
1.	Water Closet (W.C.)	One for 25 persons or	One for 15 persons or part
		part thereof	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 at	
		the rate of 3%; For over	
		200 persons add at the	
		rate of 2.5%.	
4.	Wash Basins	One for every 25 persons	One for 15 persons or part
		or part thereof	thereof
5.	Drinking water	One for every 100	
	fountains	persons with a minimum	
		of one on each floor	
6.	Baths	Preferably one on each	Preferably one on each
		floor	floor
7.	Cleaner's Sinks	One per floor minimum;	
		preferably in or adjacent	
		to sanitary rooms.	

**Note:** One water tap with drainage arrangements shall be provided for every 50 persons or part thereof in the vicinity of water closet and urinals.

Table-13
SANITATION REQUIREMENTS FOR RESIDENCES

Sl. No.	Sanitary Unit	Dwelling with individual conveniences	Dwelling without individual conveniences
1.	Bath Room	One provided with water tap	One for every two tenement
2.	Water Closet (W.C.)	One	One for every two tenement
3.	Sink (or Nahani) in the Floor	One	
4.	Water Tap	One	One with drainage arrangement in each tenement One in common bath rooms and common water closet.

Note: Where only one water closet is provided in a dwelling, the bath and water closet shall be separately accommodated.

# Table-14 SANITATION REQUIREMENTS FOR ASSEMBLY OCCUPANCY BUILDINGS (CINEMA, THEATERS, AUDITORIA. ETC.)

Sl. No.	Sanitary Unit	For Public		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	Two per 100 persons upto 200 persons. For over 200 persons add at the rate of 1 per 100 persons or part thereof	One for 15 persons.  Two for 16-35 persons	One for 1- 12 persons. Two for 13-25 persons	
2	Ablution Taps	One in each W.C.	One in each W.C.	One in each WC	One in each WC	
3	Urinals	One for 50 persons or part thereof		Nil upto 6 persons One for 7-20 persons Two for 21-45 persons		
4	Wash Basins	One for every 200 persons or part thereof	One for every 200 persons or part thereof	One for 1-15 persons Two for 16-35	One for 1- 12 persons Two for 13-25 persons	

5	Drinking	One per 100 persons or part thereof
	Water	
	Fountain	

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 are males and one third females.

Table-15

SANITATION REQUIREMENTS FOR ASSEMBLY OCCUPANCY BUILDINGS (ART, GALLERIES, LIBRARIES AND MUSEUMS)

Sl.	Sanitary Unit	For Public		For Staff	
No.		Male	Female	Male	Female
1	Water Closet (W.C.)	One for 200 persons upto 400 persons.	One per 100 persons upto 200 persons.	One for 1- 15 persons.	One for 1-12 persons.
		For over 200 persons, add at the rate of 1 per 250 persons or part thereof	For over 200 persons, add at the rate of 1 per 150 persons or part thereof	Two for 16- 35 persons	Two for 13-25 persons
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 for 50 persons or part thereof		Nil upto 6 persons One for 7- 20 persons Two for 21- 45 persons	
4	Wash Basins	One for every 200 persons or part thereof. For over 400 persons, add at the rate of 1 per 250 persons or part thereof.	One for every 200 persons or part thereof. For over 200 persons, add at the rate of 1 per 150 persons or part thereof	One for 1- 15 persons Two for 16- 35	One for 1-12 persons Two for 13-25 persons
5	Cleaner's Sink	One per floor, mi	1 1	,	,
6	Drinking Water Fountain	One per 100 persons or part thereof			

**Note:** It may be assumed that two thirds of the number are males and one third females.

Table-16
SANITATION REQUIREMENTS FOR RESTAURANT

Sl.	Sanitary	For Public		For Staff	
No.	Unit	Male	Female	Male	Female
1.	Water Closet (W.C.)	One per 50 seats upto 200 seats. For over 200 seats, add at the rate of 1 per 100 seats or part thereof	One per 50 seats upto 200 seats. For over 200 seats, add at the rate of 1 per 100 seats or part thereof	1 for 15 persons. 2 for 16-35 persons. 3 for 36-65 persons. 4 for 66-100 persons.	1 per 1-12 persons. 2 for 13-25 persons. 3 for 26-40 persons. 4 for 41-57 persons. 5 for 58-77 persons. 6for 78-100. persons.
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 for 50 persons or part thereof		Nil upto 6 persons. 1 for 7-20 persons. 2 for 21-45 persons. 3 for 46-70 persons. 4 for 71-100 persons.	
4.	Wash Basins	One for every water closet			
5.	Kitchen Sinks & Dish Washer	One per each K	itchen		
6.	Service Sink	One in the resta	urant		

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-17
SANITATION REQUIREMENTS FOR FACTORIES

Sl. No.	Sanitary Unit	For Male Personnel	For female Personnel		
1.	Water Closet	1 for 15 persons	1 for 1-12 persons		
		2 for 16-35 persons	1 for 13-25 persons.		
		3 for 36-65 persons.	2 for 26-40 persons.		
		4 for 66-100 persons.	3 for 41-57 persons.		
		For 101 to 200 persons add	4 for 58-77 persons.		
		at rate of 3%. From over	5 for 78-100 persons.		
		200 persons, add at the rate	For 101 to 200 persons,		
		of 2.5%.	add at the rate of 5%.		
			From over 200 persons		
			add at the rate of 4%.		
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 draining	One for every 25 persons or	part thereof		
	arrangement				
5.	Drinking Water	One for every 100 persons w	vith a minimum of one on		
	Fountains	each floor			
6.	Baths Preferably Showers	As required for particular trade or occupation			

*Note:* i)

- i) 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) Crèches 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-18
SANITARY REQUIREMENTS FOR LARGE STATIONS AND AIRPORTS

Sl.	Place	W.C. for	W.C. for	Urinals for Males
No.		Males	Females	only
1.	Junction Stations,	3 for first	4 for first 100	4 for every 1000
	Intermediate	1000	persons and 1	person and 1 for
	Stations and	persons and	for every	every additional
	Substations	1 for	additional 1000	1000 persons or part
		subsequent	persons or part	thereof.
		1000	thereof.	
		persons or		
		part thereof.		
2.	Terminal Stations	4 for first	5 for every	6 for every 1000
	and Bus Terminals	1000	1000 person	person and 1 for
		persons and	and 1 for every	every additional
		1 for every	additional 200	1000 persons or part
		additional	persons or part	thereof.
		1000	thereof.	
		persons or		
		part thereof.		
3.	Domestic Airports			
	Minimum.			
	For 200 persons	2*	4*	2*
	For 400 persons	5	8	6
	For 600 persons	9	15	12
	For 800 persons	12	20	16
	For 1000 persons	16	26	20
	T	18	29	22
4.	Internal Airports		10	
	For 200 persons	6	10	8
	For 600 persons	12	20	16
	For 1000 persons	18	29	22

Note: 1. Provision for wash basins, baths including shower stalls, shall be in accordance with part ix section 2- Drainage and Sanitation of National Building Code of India.

#### Notes for general guidance for water supply arrangements:

1. For new construction: Provision shall be made for under ground tank for the storage of water, having capacity at 200 litres. per person with adequate pumping arrangements to supply water to upper floors. Filtered water connection will be allowed only for use of drinking and bathing needs. For other purposes i.e. flushing and gardening etc., the individual shall be required to have own

<sup>\*</sup>At least one Indian style water closet shall be provided in each toilet. Assume 2/3 males and 1/3 females in any area.

arrangements of tube well water within the premises. While according sanction to Layout Plan, the Authority shall make a special mention that provision for space shall be kept for the construction of underground reservoir of adequate capacity along with booster pumping station.

- 2. Arrangements as given in 1 above shall also be provided in Group Housing Schemes.
- 3. The plumbing arrangement in case of new constructions shall be made in a way that the potable water shall be used for drinking, cooking & bathing only and for rest of the uses, provision for ground water can be made with dual piping system.
- 4. Low capacity cistern should preferably be provided instead of normal 12.5 litres capacity.
- 5. Rain Water Harvesting: Water harvesting through storing of water runoff including rainwater in all new buildings on plots of 300 sq m. and above will be mandatory. The plans submitted to the Authority shall indicate the system of storm water drainage along with points of collection of rain water in surface reservoirs or in recharge wells.
- 6. All building having a minimum discharge of 10,000 litres and above per day shall incorporate waste water recycling system. The recycled water should be used for horticultural purposes.

- Installation of Solar Assisted Water Heating System in Buildings: No new building in the following categories in which there is a system of installation for supplying hot water shall be built unless the system of the installation is also having an auxiliary solar assisted water heating system:-
  - Hospitals and Nursing Home
  - Hotels, Lodges, and Guest Houses, Group Housing with the plot area of 4000 sq m.
  - Hostels of Schools, Colleges and Training Centres with more than 100 Students.
  - Barracks of armed forces, paramilitary forces and police
  - Individual residential buildings having more than 150 sq m. plinth area
  - Functional Buildings of Railway Stations and Air Ports like waiting rooms, retiring rooms, rest rooms, inspection bungalows and catering units
  - Community Centres, Banquet Halls, Barat Ghars, Kalayana Mandaps and buildings for similar use.

#### A. Definitions

i)	"Solar Assisted Water	A device to heat water using solar energy as heat
	Heating System	source.
ii)	"Auxiliary back up"	Electricity operated or fuel fired boilers/systems to
		heat water coming out from solar water heating
		system to meet continuous requirement of hot
		water.
iii)	"New Building"	Such buildings of above said categories for which
		construction plans have been submitted to the
		Authority for clearance.
iv)	"Existing building"	Such buildings, which are licensed to perform
		their respective business.

# B. Guidelines for Installation of Solar Water Heating System

- i. New Buildings: Clearance of plan for the construction of new buildings of the aforesaid categories shall only be given if they have a provision in the building design itself for an insulated pipeline from the rooftop in the building to various distribution points where hot water is required. The building must have a provision for continuous water supply to the solar water heating system. The building should also have open space on the rooftop, which receives direct sun light. The load bearing capacity of the roof should at least be 50 kg. per sq m. All new buildings of above said categories must complete installation of solar water heating systems before obtaining necessary license to commence their business.
- **ii. Existing Buildings:** Installation of Solar Assisted Water Heating Systems in the existing building shall be made mandatory at the time of change of use to above said category provided there is a system or installation for supplying hot water.

- **iii. Capacity:** The capacity of solar water heating system to be installed on the building of different categories shall be decided in consultation with the local body. The recommended minimum capacity shall not be less than 25 lt. per day for each bathroom and kitchen subject to the condition that maximum of 50% of the total roof area is provided with the system.
- iv. Specifications: Installation of Solar Assisted Water Heating Systems shall conform to BIS specification IS 12933. The solar collectors used in the system shall have the BIS certification mark.
- v. Auxiliary System: Wherever hot water requirement is continuous, auxiliary heating arrangement either with electric elements or oil of adequate capacity may be provided

## 4 Fire Protection and Fire Safety Requirements

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

#### (2) Procedure for Clearance from Fire Service

- **A.** The concerned Authority shall refer the building plans to the Chief Fire Officer for obtaining clearance in respect of building identified in clause 8.1 of these 73.1.
- **B.** The Authority shall furnish three sets of complete building plans along with prescribed fee to the Chief Fire Officer, after ensuring that the proposals are in line with Master Plan/Zonal Plan of the area.
- C. The plans shall be clearly marked and indicate the complete fire protection arrangements and the means of access/escape for the proposed building with suitable legend along with standard signs and symbols on the drawings. The same shall be duly signed/certified by a licensed Fire Consultant/Architect. The information regarding fire safety measures shall be furnished.
- **D.** The Chief Fire Officer shall examine these plans to ensure that they are in accordance with the provisions of fire safety and means of escape as per these bye- laws and shall forward two sets of plans duly signed for implementation to the building sanctioning Authority.
- **E.** After completion of fire fighting installations as approved and duly tested and certified by the licensed Fire Consultant / Architect, the Owner/ Builder of the building shall approach the Chief Fire Officer through the concerned Authority for obtaining clearance from fire safety and means of escape point of view. The concerned Authority shall ensure that clearance from Chief Fire Officer has been obtained for the building identified before granting the completion certificate.

- **F.** On receipt of the above request, the Chief Fire Officer shall issue the No Objection Certificate from fire safety and means of escape point of view after satisfying himself that the entire fire protection measures are implemented and functional as per approved plans.
- **G.** Any deficiencies observed during the course of inspection shall be communicated to the Authority for rectification and a copy of the same shall be forwarded to the concerned building owner/builder.

#### (3) Renewal of Fire Clearance

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

A. Public entertainment and assembly

**B.**Hospitals

C.Hotels

**D.**Under ground shopping complex

**E.** Such other occupancies as decided by the Authority.

### **(4)** Fee

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

### (5) Fire Consultant

The Architect of the project will be responsible for making provisions for fire protection and fire fighting measure as provided and for that he may consult an expert in this field, as in case of other professionals for structural, sanitary and others.

#### (6) Terminology

All the technical terms shall have the meaning as defined in National Building Code of India, 2005, Part-IV, Fire Protection as amended from time to time but for the terms which are defined otherwise in these Regulations.

# (5) General

The Chief Fire Officer may insist on suitable provisions in the building from fire safety and means of escape point of view depending on the occupancy, height or on account of new developments creating special fire hazard, in addition to the provision of these building Regulations and part IV (Fire Protection) of National Building Code of India, 2005.

#### (6) Means Of Access

The following provisions of means of access shall be applicable.

#### A. Provisions of Exterior Open Spaces around the Building

- i. The set backs of the respective building shall be as per Master Plan, detailed Layout Plan, general Development Plan.
- ii. For multi-Storeyed buildings identified the provision of exterior open spaces around the buildings shall be as given in Table.

TABLE-19
PROVISION OF EXTERIOR OPEN SPACES AROUND THE BUILDINGS

Sl. No.	Height of the Building Upto (m.)	Exterior open spaces to be left out on all sides in m. (front rear and sides in each plot)
1	10	As per prescribed set backs
2	15	5
3	18	6
4	21	7
5	24	8
6	27	9
7	30	10
8	35	11
9	40	12
10	45	13
11	50	14
12	55 and above	16

Note: On sides where no habitable rooms face, a minimum space of 9.0 m. shall be left for heights above 27.0 m.

iii In case of multi storeyed buildings the exterior open space around a building shall be of hard surface capable of taking load of fire engine weighting upto 45 tonnes.

# (7) Exit Requirement

### A. Type of Exits:

- i. Exits shall be either horizontal or vertical type. An exit may be doorway, corridor and passage to an internal staircase or external staircase, ramp or a verandah and/ or terraces that have access to the street or to roof of a building. An exit may also include horizontal exit leading to an adjoining building at the same level.
- ii. Lifts escalators and revolving doors shall not be considered as exits.

#### **B.** Number of Size of Exits:

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

#### **C.** Arrangements of Exits:

- i. Exits shall be so located so that the travel distance on the floor shall not exceed 22.50 m. for residential, educational, institutional and hazardous occupancies and 30.0 m. for assembly, business, mercantile, industrial and storage occupancies. Whenever more than one exit is required for a floor of a building they 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.
- ii. The travel distance to an exit from the remote point shall not exceed half the distance as stated above except in the case of institutional occupancy in which case it shall not exceed 6.0 m.

# D. Capacity of Exit:

The capacity of exits (staircase, ramps and doorways) indicating the number of persons which could be safety evacuated through a unit exit width of 50 cm shall be as given below:

TABLE-20
OCCUPANTS PER UNIT EXIT WIDTH

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

#### **E.** Staircase Requirements:

There shall be minimum of two staircases and one of them shall be enclosed stairway and the other shall be on the external walls of building and shall open directly to the exterior, interior open space or to any open place of safety. Single staircase may be accepted for educational, business or apartment buildings where floor area does not exceed 300 sq m. and height of the building does not exceed 24 m. and other requirements of occupant load ,travel distance and width of staircase shall meet the requirement. The single staircase in such case shall be on the outer wall of the building.

#### F. Minimum Width Provision for Stairways:

The following minimum width provisions shall be made for each stairway

i.	Residential	low rise	building	0.9 m.

ii. Other residential building e.g. flats,	1.25m
iii. hostels, group housing, guest houses, etc	1.25 m.

iv. Assembly buildings like Auditorium,

theatres and cinemas	2.0 m.
v. All other buildings including hotels	1.5 m.
vi Institutional building like hospitals	2.0 m.
vii Educational building like School, Colleges.	1.5 m.

#### G. Minimum Width Provision for Passageway/Corridors:

The following minimum width provisions shall be made for each passage way/corridor.

i.Residential buildings, dwelling unit type	1.0 m.
ii.Residential buildings, e.g., hostels, etc.	1.25 m.

iii.Assembly buildings like auditorium theatres

and cinemas 2.0 m. iv.All other buildings including hotels 1.5 m.

## H. Doorways:

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

ii.No exit doorways shall be less than 1 m. in width and 1.5 m. in case of hospital and ward block. Doorways shall not be less than 2.10 m. in height.

- i. Exit doorways shall open outwards, that is away from the room but shall not obstruct the travel along any exit. No door when opened shall reduce the required width of stairway or landing to less than 1m. Overhead or sliding door shall not be installed.
- ii. Exit door shall not open immediately upon a flight or stairs. A landing equal to at least, the width of the door shall be provided in the stairway at each doorway. Level of landings shall be the same as that of the floor, which it serves.
- iii. Exit doorways shall be open able from the side, which they serve without the use of a key.
- iv. Revolving doors shall not be allowed.

#### I. Stairways:

- i. Interior stairs shall be constructed of non-combustible material throughout.
- ii. Interior stairs shall be constructed as a self-contained unit with at least one side adjacent to an external wall and shall be completely enclosed.
- iii. A staircase shall not be arranged round a lift shaft for buildings 15.0 m. and above height. The staircase location shall be to the satisfaction of Chief Fire Officer.
- iv. Hollow combustible construction shall not be permitted.
- v. The minimum width of treads without nosing shall be 25 cm. for an internal staircase for residential high-rise buildings. In the case of other buildings, the minimum tread shall be 30 cm. The treads shall be constructed and maintained in a manner to prevent slipping. Winders shall be allowed in residential buildings provided they are not at the head of a downward flight.
- vi. The maximum height of riser shall be 19 cm. in the case of residential high rise buildings and 15 cm in the case of other buildings. These shall be limited to 13 per flight.
- vii. Handrails shall be provided with a minimum height of 1m. from the center of the tread.
- viii. The minimum headroom in a passage under the landing of a staircase and under the staircase shall be 2.10 m.
- ix. For building more than 24 m. in height, access to main staircase shall be through a lobby created by double door of one hour fire rating. One of the doors will be fixed in the wall of the staircase and other after the lobby.
- x. No living space, store or other fire risk shall open directly into the staircase or staircases.

- xi. External exit door of staircase enclosure at ground level shall open directly to the open spaces or can be reached without passing through any door other than a door provided to form a draught lobby.
- xii. The main staircase and fire escape staircase shall be continuous from ground floor to the terrace level.
- xiii. No electrical shafts/AC ducts or gas pipe etc. shall pass through the staircase. Lift shall not open in staircase landing.
- xiv. No combustible material shall be used for decoration/wall paneling in the staircase.
- xv. Beams/columns and other building features shall not reduce the head room/width of the staircase.
- xvi. The exit sign with arrow indicating the way to the escape route shall be provided at a suitable height from the floor level on the wall and shall be illuminated by electric light connected to corridor circuits. All exit way marking sign should be flush with the wall and so designed that no mechanical damage shall occur to them due to moving of furniture or other heavy equipments. Further all landings of floor shall have floor-indicating boards indicating the number of floor.
- xvii. The floor indication board shall be placed on the wall immediately facing the flight of stairs and nearest to the landing. It shall be of size not less than 0.2 m. x 0.5 m.
- xviii. Individual floors shall be prominently indicated on the wall facing the staircase.
  - xix. In case of single staircase it shall terminate at the ground floor level and the access to the basement shall be by a separate staircase. However, the second staircase may lead to basement levels provided the same is separated at ground level either by ventilated lobby with discharge points at two different ends through enclosures.

#### J. Fire Escapes or External Stairs:

- i. Fire escape shall not be taken into account while calculating the number of staircases for a building.
- ii. All fire escapes shall be directly connected to the ground.
- iii. Entrance to the fire escape shall be separate and remote from internal staircase.
- iv. The route to fire escape shall be free of obstructions at all times except the doorway leading to the fire escape which shall have the required fire resistance.
- v. Fire escape shall be constructed of non-combustible materials.
- vi. Fire escape stairs shall have straight flight not less than 125 cm wide with 25 cm treads and risers not more than 19 cm.
- vii. Handrails shall be at a height not less than 1m.
- viii. Fire escape staircase in the mercantile, business, assembly, hotel buildings above 24 m. height shall be a fire tower and in such a case width of the same shall not be less than the width of the main staircase. No combustible material shall be allowed in the fire tower.

# K. Spiral Stairs

- i. The use of spiral staircase shall be limited to low occupant load and to a building height 9 m.
- ii. A spiral stair shall not be less than 1.5 m in diameter and shall be designed to give the adequate headroom.

#### L Staircase Enclosures

- i. The external enclosing walls of the staircase shall be of the brick or the R.C.C. construction having fire resistance of not less than two hours. All enclosed staircases shall have access through self-closing door of one-hour fire resistance. These shall be single swing doors opening in the direction of the escape. The door shall be fitted with the check action door closers.
- ii. The staircase enclosures on the external wall of the building shall be ventilated to the atmosphere at each landing.
- iii. Permanent vent at the top equal to the 5% of the cross sectional area of the enclosure and openable sashes at each floor level with area equal to 1 to 15% of the cross sectional area of the enclosure on external shall be provided. The roof of the shaft shall be at least 1 m. above the surrounding roof. There shall be no glazing or the glass bricks in any internal closing wall of staircase. If the staircase is in the core of the building and cannot be ventilated at each landing, a positive of 5-mm. w.g. by an electrically operated blower/blowers shall be maintained.
- iv. The mechanism for pressurizing the staircase shaft shall be so installed that the same shall operate automatically on fire alarm system/sprinkler system and be provided with manual operation facilities.

#### M. Ramps

- i. Ramps of slope of not more than 1 in 10 may be substituted for and shall comply with all the applicable requirements of all required stairways as to enclosure capacity and limiting dimensions. Larger slopes shall be provided for special uses but in no case greater than 1 in 8. For all slopes exceeding 1 in 10 and where the use is such as to involve danger of slipping, the ramp shall be surfaced with approved non-slipping material.
- ii. The minimum width of the ramps in the Hospitals shall be 2.4 m. and in the basement using car parking shall be 6.0 m.
- iii. Handrails shall be provided on both sides of the ramp.
- iv. Ramp shall lead directly to outside open space at ground level or courtyards of safe place.
- v. For building above 24.0 m. in height, access to ramps from any floor of the building shall be through smoke fire check door.

vi. In case of nursing homes, hospitals etc. area exceeding 300 sq m. at each floor one of the exit facility shall be a ramp of not less than 2.4 m. in width.

#### (10) Provision of Lifts

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

#### i. LIFT ENCLOSURE/LIFT

General requirements shall be as follows

- a. Walls of lift enclosures shall have a fire rating of two hours. Lift shafts shall have a vent at the top of area not less than 0.2 sq m.
- b. Lift motor room shall be located preferably on top of the shaft and separated from the shaft by the floor of the room.
- c. Landing door in lift enclosures shall have a fire resistance of not less than one hour.
- d. The number of lifts in one lift bank shall not exceed four. A wall of two hours fire rating shall separate individual shafts in a bank.
- e. Lift car door shall have a fire resistance rating of 1 hour.
- f. For buildings 15.0 m. and above in height, collapsible gates shall not be permitted for lifts and solid doors with fire resistance of at least one hour shall be provided.
- g. If the lift shaft and lobby is in the core of the building a positive pressure between 25 and 30 pa shall be maintained in the lobby and a possible pressure of 50 pa shall be maintained in the lift shaft. The mechanism for the pressurization shall act automatically with the fire alarm/sprinkler system and it shall be possible to operate this mechanically also.
- h. Exit from the lift lobby, if located in the core of the building, shall be through a self-closing fire smoke check door of one-hour fire resistance.
- i. Lift shall not normally communicate with the basement. If however, lifts are in communication, the lift lobby of the basement shall be pressurized as in (g) with self closing door as in (h).
- j. Grounding switch (es), at ground floor level shall be provided to enable the fire service to ground the lifts.

- k. Telephone/talk back communication facilities may be provided in lift cars for communication system and lifts shall be connected to the fire control room of the building.
- 1. Suitable arrangements such as providing slope in the floor of the lift lobby shall be made to prevent water used during fire fighting, etc at any landing from entering the lift shafts.
- m.A sign shall be posted and maintained on every floor at or near the lift indicating that in case of fire, occupants shall use the stairs unless instructed otherwise. The sign shall also contain a plan for each floor showing the location of the stairways. Floor marking shall be done at each floor on the wall in front of the lift-landing door.
- n. Alternate power supply shall be provided in all the lifts.

#### ii. FIRE LIFT

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

- a. To enable fire service personnel to reach the upper floors with the minimum delay, one or more of the lifts shall be so designed so as to be available for the exclusive use of the fireman in an emergency and be directly accessible to every dwelling/lettable floor space on each floor.
- b. The lift shall have a floor area of not less than 1.4 sq.mt. It shall have a loading capacity of not less than 545 kg. (8 persons lift) with automatic closing doors.
- c. The electric supply shall be on a separate service from electric supply mains in a building and the cables run in a route safe from fire, i.e. within a lift shaft. Lights and fans in the elevator having wooden paneling or sheet steel construction shall be operated on 24-volt supply.
- d. In case of failure of normal electric supply, it shall automatically switchover to the alternate supply. For apartment houses, this changeover of supply could be done through manually operated changeover switch. Alternatively, the lift should be so wired that in case of power failure, it comes down at the ground level and comes to stand still with door open.
- e. The operation of a fire lift shall by a single toggle of twobutton switch situated in a glass-fronted box adjacent to the lift at the entrance level. When the switch is on landing; call points will become inoperative and the lift will be on car control only or on a priority control device. When the switch is off, the lift will return to normal working. This lift can be used by the occupants in normal times.
- f. The words 'F1RE LIFT' shall be conspicuously displayed in fluorescent paint on the lift landing doors at each floor level.
- g. The speed of the fire lift shall be such that it can reach to the top floor from ground level within one minute.

#### (11) Basement

As provided in the Regulations.

#### A. Requirements

- i. The access to the basement shall be either from the main or alternate staircase providing access and exit from higher floors. Where the staircase is continuous the same shall be enclosed type serving as a fire separation from the basement floor and higher floors. Open ramps shall be permitted if they are constructed within the building line subject to the provision of the (iv).
- ii. In case of basement for office, sufficient number of exit ways and access ways shall be provided with a travel distance not more than 15.0 m. The travel distance in case of dead-end shall be 7.5 m.
- iii. The basement shall be partitioned and in no case compartment shall be more than 500 sq m. and less than 50 sq m. area except parking. Each compartment shall have ventilation standards as laid down in Bye-Laws separately and independently. The partition shall be made in consultation with Chief Fire Officer.
- iv. The first basement (immediately below ground level) can be used for services/parking/other permissible services. Lower basement, if provided, shall exclusively be used for car parking only.
- v. Each basement shall be separately ventilated. Vents with cross-sectional area (aggregate) not less than 2.5 percent of the floor area spread evenly round the perimeter of the basement shall be provided in the form of grills or breakable starboard lights or pavement lights or by way of shafts. Alternatively a system of air inlets shall be provided at basement floor level and smoke outlets at basement ceiling level. Inlets and extracts may be terminated at ground level with starboard or pavement lights. Ducts to convey fresh air to the basement floor level are to be laid. Starboard and pavement lights should be in positions easily accessible to the firemen and clearly marked "SMOKE OUTLET" or AIR INLET" with an indication of area served at or near the opening.
- vi. The staircase of basement shall be of enclosed type having fire resistance of not less than two hours and shall be situated at the periphery of the basement to be entered at ground level only from the open air and in such positions that smoke from any fire in the basement shall not obstruct any exit serving the ground and upper stories of the building and shall communicate with basement through a lobby provided with fire resisting self closing door of one hour rating. In case of basement being used as car parking only, the travel distance shall be 45 m.
- vii. In multi-storeyed basements, intake duct may serve all basements levels, but each basement and basement compartment shall have separate smoke outlet duct or ducts. Mechanical extractors for smoke venting system from lower basement levels shall also be provided. The system shall be of such design as to operate on

- actuation of smoke, heat sensitive detectors/sprinklers, if installed, and shall have a considerably superior performance compared to the standard units. It shall also have an arrangement to start manually.
- viii. Mechanical extractors shall have an internal locking arrangement so that extractors shall continue to operate and supply fans shall stop automatically with the actuation of fire detectors. Mechanical extractors shall be designed to permit 30 air changes per hour in case of fire or distress call. However, for normal operation, only 30 air changes or any other convenient factor can be maintained.
- ix. Mechanical extractors shall have an alternate source of power supply.
- x. Ventilating ducts shall be integrated with the structure and made out of brick masonry or RCC as far as possible and when this duct crosses the transformer area of electrical switchboard, fire dampers shall be provided.
- xi. Kitchens working on gas fuel shall not be permitted in basement/sub-basement.
- xii. If cutouts are provided from basement to the upper floors or to the atmosphere, all side cutout openings in the basements shall be protected by sprinkler heads at closed spacing so as to form a water curtain in the event of a fire.
- xiii. Dewatering pump shall be provided in all basements.

# (12) Provision of Helipad

All high-rise buildings 50 m. and above shall have provision for a Helipad on the terrace. The same shall be approved by the Authority.

#### (13) Service Ducts/Refuge Chute

- A. Service duct shall be enclosed by walls and door, if any, of 2 hours fire rating. If ducts are larger than 10 sq m. the floor should seal them, but suitable opening for the pipes to pass through shall be provided with the gaps sealed.
- B. A vent opening at the top of the service shaft shall be provided between one-fourth and one-half of the area of the shaft. Refuge chutes shall have an outlet at least of wall of non-combustible material with fire resistance of not less than two hours. They shall not be located within the staircase enclosure or service shafts or airconditioning shafts. Inspection panel and door shall be tight fitting with 1 hour fire resistance; the chutes should be as far away as possible form exits.
- C. Refuge chutes shall not be provided in staircase walls and A/C shafts etc.

#### (14) Electrical Services

Electrical Services shall conform to the following:

- **A.** The electric distribution cables/wiring shall be laid in a separate duct shall be sealed at every floor with non-combustible material having the same fire resistance as that of the duct. Low and medium voltage wiring running in shaft and in false ceiling shall run in separate conduits.
- **B.** Water mains, telephone wires, inter-com lines, gas pipes or any other service lines shall not be laid in ducts for electric cables.
- C. Separate conduits for water pumps, lifts, staircases and corridor lighting and blowers for pressuring system shall be directly from the main switch panel and these circuits shall be laid in separate conduit pipes, so that fire in one circuit will not affect the others. Master switches controlling essential service circuits shall be clearly labeled.
- **D.** The inspection panel doors and any other opening in the shaft shall be provided with airtight fire doors having fire resistance of not less then 1 hour
- **E.** Medium and low voltage wiring running in shafts, and within false ceiling shall run in metal conduits. Any 240 voltage wiring for lighting or other services, above false ceiling should have 660V grade insulation. The false ceiling including all fixtures used for its suspension shall be of non-combustible material.
- **F.** An independent and well-ventilated service room shall be provided on the ground floor with direct access from outside or from the corridor for the purpose of termination of electrical supply from the licenses service and alternative supply cables. The doors provided for the service room shall have fire resistance of not less than 1 hour
- **G.** MCB and ELCB shall be provided for electrical circuit.

#### (15) Staircase And Corridor Lights

The staircase and corridor lighting shall be on separate circuits and shall be independently connected so that it could be operated by one switch installation on the ground floor easily accessible to fire fighting staff at any time irrespective of the position of the individual control of the light points, if any. It should be of miniature circuit breaker type of switch so as to avoid replacement of fuse in case of emergency.

- A. Staircase and corridor lighting shall also be connected to alternate source of power supply.
- B. Suitable arrangement shall be made by installing double throw switches to ensure that the lighting installed in the staircase and the corridor does not get connected to two sources of supply simultaneously. Double throw switch shall be installed in the service room for terminating the stand by supply.
- C. Emergency lights shall be provided in the staircase and corridor.

# (16) A. Air-Conditioning

i. Air- conditioning system should be installed and maintained so as to minimise the danger of spread of fire, smoke or fumes thereby from one floor of fire area to another or from outside into any occupied building or structure.

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

### **B.** Air- Conditioning Should Conform To The Following:

- i. Escape routes like staircase, common corridors, lift lobbies; etc should not be used as return air passage.
- ii. The ducting should be constructed of metal in accordance with BIS 655:1963
- iii. Wherever the ducts pass through fire walls or floor, the opening around the ducts should be sealed with fire resisting material of same rating as of walls / floors.
- iv. Metallic ducts should be used even for the return air instead of space above the false ceiling.
- v. The material used for insulating the duct system (inside or outside) should be of flame resistant (IS 4355: 1977) and non-conductor of heat.
- vi. Area more than 750 sq m. on individual floor should be segregated by a firewall and automatic fire dampers for isolation should be provided.
- vii. In case of more than one floor, arrangement by way of automatic fire dampers for isolating the ducting at every floor from the floor should be made. Where plenums used for return air passage, ceiling and its features and air filters of the air handling units, these should be flame resistant. Inspection panels should be provided in the main trenching. No combustible material should be fixed nearer than 15 cm. to any duct unless such ducting is properly enclosed and protected with flame resistant material
- viii. In case of buildings more than 24 m. in height, in non-ventilated lobbies, corridors, smoke extraction shaft should be provided.

# C. Fire Dampers

- i. These shall be located in air ducts and return air ducts/passages at the following points:
  - a. At the fire separation wall.
  - b. Where ducts/passages enter the central vertical shaft.
  - c. Where the ducts pass through floors.

- d. At the inlet of supply air duct and the return air duct of each compartment on every floor.
- ii. The dampers shall operate automatically and shall simultaneously switch off the air- handling fans. Manual operation facilities shall also be provided.
- iii. For blowers, where extraction system and dust accumulators are used, dampers shall be provided.
- iv. Fire/smoke dampers (for smoke extraction shafts) for buildings more than 24 m. in height. For apartment houses in non-ventilated lobbies /corridor operated by detection system and manual control sprinkler system. For other buildings on operation of smoke/ heat detection system and manual control/sprinkler system.
- v. Automatic fire dampers shall be so arranged so as to close by gravity in the direction of air movement and to remain tightly closed on operation of a fusible link

#### (17) Boiler Room

Provisions of boiler and boiler rooms shall conform to Indian Boiler Act. Further, the following additional aspects may be taken into account in the location of boiler/boiler room

- **A.** The boiler shall not be allowed in sub-basement, but may be allowed in the basement away from the escape routes.
- **B.** The boilers shall be installed in a fire resisting room of 4 hours fire resistance rating, and this room shall be situated on the periphery of the basement. Catch pits shall be provided at the low level.
- **C.** Entry to this room shall be provided with a composite door of 2 hours fire resistance.
- **D.** The boiler room shall be provided with fresh air inlets and smoke exhaust directly to the atmosphere.
- **E.** The furnace oil tank for the boiler if located in the adjoining room shall be separated by fire resisting wall of 4 hours rating. The entrance to this room shall be provided with double composite doors. A curb of suitable height shall be provided at the entrance in order to prevent the flow of oil into boiler room in case of tank rupture.
- **F.** Foam inlets shall be provided on the external walls of the building near the ground level to enable the fire services to use foam in case of fire.

# (18) Alternate Source Of Electric Supply

A stand by electric generator shall be installed to supply power to staircase and corridor lighting circuits, lifts detection system, fire pumps, pressurization fans and bowlers, P..A system, exit sign, smoke extraction system, in case of failure of normal electric supply. The generator shall be capable of taking starting current of all the machines and circuits stated above simultaneously.

If the standby pump is driven by diesel engine, the generator supply need not be connected to the standby pump. The generator shall be automatic in operation.

### (19) A. Safety Measures In Electric Sub-Station

- i. Clear independent approach to the sub-station from outside the building shall be made available round the clock
- ii. The approaches/corridors to the sub-station area shall be kept clear for movement of men and material at all times.
- iii. The sub-station space is required to be provided with proper internal lighting arrangements.
- iv. In addition to natural ventilation proper ventilation to the sub-station area is to be provided by grill shutters and exhaust fans at suitable places so as to discharge all smoke from the sub-station without delay in case of fire so that sub-station operations can be carried out expeditiously.
- v. Cable trenches of 0.6 m. X 0.6 m. dummy floor of 0.6 mt. depth shall be provided to facilitate laying of cable inside the building for connecting to the equipment.
- vi. Steel shutters of 2.5 m. x 2.5 m with suitable grills shall be provided for transformers and sub-station room.
- vii. The floor of the sub-station should be capable of carrying 10 tons of transformer weight on wheels.
- viii. Built up substation space is to be provided free of cost.
  - ix. Sub-station space should be clear from any water, sewer, air conditioning, and gas pipe or telephone services. No other service should pass through the substation space or the cable trenches.
  - x. Proper ramp with suitable slope may be provided for loading and unloading of the equipment and proper approach shall be provided.
  - xi. RCC pipes at suitable places as required shall be provided for the cable entries to the substation space and making suitable arrangement for non-ingress of water through these pipes.
- xii. The substation space is to be provided in the approved/sanctioned covered area of the building.
- xiii. Any other alteration /modification required while erection of the equipment will be made by the Owner / builder at site as per requirement.
- xiv. Adequate arrangement for fixing chain pulley block above the fixing be available for load of 15 tons.
- xv. Provision shall be kept for the sumps so as to accommodate complete volume of transformer oil, which can spillover in the event of explosion of the transformer in the basement of the building. Sufficient arrangement should exist to avoid fire in the sub-station building from spread of the oil from the sumps.
- xvi. Arrangement shall be made for the provision of fire retardent cables so as to avoid chances of spread of fire in the sub-station building.
- xvii. Sufficient pumping arrangement should exist for pumping the water out, in case of fire so as to ensure minimum loss to the switchgear and transformer.

- xviii. No combustible material shall be stacked inside the substation premises or in the vicinity to avoid chances of fire.
  - xix. It should be made mandatory that the promoters of the multi-storeyed building should get substation premises inspected once a year to get their license revalidated for the provision of electric supply from Electricity Board so that suitable action can be taken against the Owner / Builder in case of non- implementation.
  - xx. The sub-station must not be located below the 1st basement and above the ground floor.
- xxi. The substation space should be totally segregated from the other areas of the basement by fire resisting wall. The ramp should have a slope of 1:10 with entry from ground level. The entire Sub-station space including the entrance at ground floor be handed over to the licensee of electricity free of cost and rent.
- xxii. The sub-station area shall have a clear height of 3.6 m. below beams. Further the Sub-station area will have level above the rest of basement level by 0.60 m.
- xxiii. It is to be ensured that the Sub-station area is free of seepage / leakage of water.
- xxiv. The licensee of electricity will have the power to disconnect the supply of the building in case of violation of any of the above points.
- xxv. Electric sub station enclosure must be completely segregated with 4-hours fire rating wall from remaining part of basement.
- xxvi. The Sub-station should be located on periphery /sub basement and (not above ground floor).
- xxvii. Additional exit shall be provided if travel distance from farthest corner to ramp is more than 15 m.
- xxviii. Perfect independent vent system @ 30 air changes per hour linked with detection as well as automatic high velocity water spray system shall be provided.
- xxix. All the transformers shall be protected with high velocity water spray system / Nitrogen Injection System Carbon Dioxide total flooding system in case of oil filled transformer. In addition to this, manual control of auto high velocity spray system for individual transformers shall be located outside the building at ground floor.
- xxx. Suitable arrangement for pump house, water storage tanks with main electrical pump and a diesel-operated pump shall be made if no such arrangement is provided in the building. In case the water pumping facilities are existing in the building for sprinkler system, the same should however be utilized for high velocity water spray system. Alternatively automatic CO2 total flooding system shall be provided with manual controls outside the electric sub-station.
- xxxi. System shall have facility to give an audio alarm in the basement as well as at the control room.
- xxxii. Fire control room shall be manned round the clock.
- xxxiii. The electric sub station shall have electric supply from alternate source for operation of vent System lighting arrangements.
- xxxiv. Cable trenches shall be filled with sand

- xxxv. Party walls shall be provided between two transformers as per the rules.
- xxxvi. Electric control panels shall be segregated.
- xxxvii. Exits from basement electric substation shall have self-closing fire smoke check doors of 2-hours fire rating near entry to ramp.
- xxxviii. All openings to lower basement or to ground floor shall be sealed properly.
  - xxxix. Yearly inspection shall be carried out by electrical load sanctioning Authority.
    - xl. Ramp to be designed in a manner that in case of fire no smoke should enter the main building.
    - xli. Electric substation transformer shall have clearance on all sides as per BBL/relevant electric rules.
    - xlii. Other facility shall be as per Building Bye-Laws and relevant electric rules.
    - xliii. Rising electrical mains shall consist of metal bus bars suitably protected from safety point of view.
    - xliv. Dry transformer shall be preferred.

## (20) Fire Protection Requirements

Buildings shall be planned, designed and constructed to ensure fire safety and this shall be done in accordance with Part-IV Fire and Life Safety of National Building Code of India, 2005 unless otherwise specified. In the case of identified buildings the building schemes shall also be cleared by the Chief Fire Officer.

# A. First Aid /Fixed Fire Fighting /Fire Detection Systems And Other Facilities

Provision of fire safety arrangement for different occupancy as indicated below shall be as per NBO code.

- i. Access
- ii. Wet Riser
- iii. Down Comer
- iv. Hose Reel
- v. Automatic Sprinkler System
- vi. Yard Hydrant
- vii. U.G. Tank with Draw off Connection
- viii. Terrace Tanks
  - ix. Fire Pump
  - x. Terrace Pump
  - xi. First Aid Fire Fighting Appliances
- xii. Auto Detection System
- xiii. Manual operated Electrical Fire Alarm System
- xiv. P.A System with talk back facility
- xv. Emergency Light
- xvi. Auto D.G. Set
- xvii. Illuminated Exit Sign
- xviii. Means of Escape

- xix. Compartimentation
- xx. MCB /ELCB
- xxi. Fire Man Switch in Lift
- xxii. Hose Boxes with Delivery Hoses and Branch
- xxiii. Pipes Refuge Area

#### **NOTE:**

- 1 Where more than one riser is required because of large floor area, the quantity of water and pump capacity recommended should be finalized in consultation with Chief Fire Officer.
- 2 The above quantities of water shall be exclusively for fire fighting and shall not be utilized for domestic or other use.
- A facility to boost up water pressure in the riser directly from the mobile pump shall be provided in the wet riser, down comer system with suitable fire service inlets (collecting head) with 2 to 4 numbers of 63 mm inlets for 100-200 mm dia main, with check valve and a gate valve.
- 4. Internal diameter of rubber hose for reel shall be minimum 20 mm. A shut off branch with nozzle of 5 mm. size shall be provided.
- Fire pumps shall have positive suctions. The pump house shall be adequately ventilated by using normal/mechanical means. A clear space of 1.0 m. shall be kept in between the pumps and enclosure for easy movement /maintenance. Proper testing facilities and control panel etc. shall be provided.
- 6 Unless otherwise specified in Regulations, the fire fighting equipments /installation shall conform to relevant BIS Specifications.
- 7 In case of mixed occupancy, the fire fighting arrangement shall be made as per the highest class of occupancy.
- 8 Requirement of water based first aid fire extinguishers shall be reduced to half if hose reel is provided in the Building.

#### (21) Static Water Storage Tank

- A. A satisfactory supply of water exclusively for the purpose of fire fighting shall always be available in the form of underground static storage tank with specified capacity with arrangements of replenishment by town's main or alternative source of supply @ 1000 liters per minute. The static storage water supply required for the above mentioned purpose should entirely be accessible to the fire tenders of the local fire service. Provision of suitable number of manholes shall be made available for inspection repairs and insertion of suction hose etc. The covering slab shall be able to withstand the vehicular load of 45 tonnes in case of high rise and 22 tonnes in case of low rise buildings. A draw off connection shall be provided. The slab need not strengthened if the static tank is not located in mandatory set-back area.
- **B.** To prevent stagnation of water in the static water tank, the suction tank of the domestic water supply shall be fed only through an over flow arrangement to maintain the level therein at the minimum specified capacity.
- C. The static water storage tank shall be provided with a fire brigade collecting branching with 4 Nos. 63mm dia instantaneous male inlets

arranged in a valve box with a suitable fixed pipe not less than 15 cm dia to discharge water into the tank. This arrangement is not required where down comer is provided.

# (22) Automatic Sprinklers

Automatic sprinkler system shall be installed in the following buildings:

- **A.** All buildings of 24 m. and above in height, except group housing and 45 m. and above in case of apartment /group housing society building.
- **B.** Hotels below 15 m. in height and above 1000 sq m. built up area at each floor and or if basement is existing.
- C. All hotels, mercantile, and institutional buildings of 15 m. and above.
- **D.** Mercantile building having basement more than one floor but below 15 m. (floor area not exceeding 750 sq m.)
- **E.** Underground Shopping Complex.
- **F.** Underground car / scooter parking /enclosed car parking.
- **G.** Basement area 200 sq m. and above.
- **H.** Any special hazards where the Chief Fire Officer considers it necessary.
- **I.** For buildings up to 24 m. in height where automatic sprinkler system is not mandatory as per these Bye-Laws, if provided with sprinkler installation following relaxation may be considered.
  - i. Automatic heat/smoke detection system and M.C.P. need not be insisted upon.
  - ii. The number of Fire Extinguisher required shall be reduced by half.

# (23) Fixed Carbon Di-Oxide / Foam / DCO Water Spray Extinguishing System

Fixed extinguishing installations shall be provided as per the relevant specifications in the premises where use of above extinguishing media is considered necessary by the Chief Fire Officer.

### (24) Fire Alarm System

All buildings of 15 m. and above in height shall be equipped with fire alarm system, and also residential buildings (Dwelling House, Boarding House and Hostels) above 24 m. height.

- **A.** All residential buildings like dwelling houses (including flats) boarding houses and hostels shall be equipped with manually operated electrical fire alarm system with one or more call boxes located at each floor. The location of the call boxes shall be decided after taking into consideration their floor area without having to travel more than 22.5 m.
- **B.** The call boxes shall be of the break glass type without any moving parts, where the call is transmitted automatically to the control room without any other action on the part of the person operating the call boxes.
- **C.** All call boxes shall be wired in a closed circuit to a control panel in a control room, located as per Bye-Laws so that the floor number from

where the call box is actuated is clearly indicated on the control panel. The circuit shall also include one or more batteries with a capacity of 48 hours normal working at full load. The battery shall be arranged to be a continuously trickle charged from the electric mains.

- **D.** The call boxes shall be arranged to sound one or more sounders so as to ensure that all occupants of the floor shall be warned whenever any call box is actuated.
- **E.** The call boxes shall be so installed that they do not obstruct the exit ways and yet their location can easily be noticed from either direction. The base of the call box shall be at a height of 1.5 m. from the floor level.
- **F.** All buildings other than as indicated above shall, in addition to the manually operated electrical fire alarm system, be equipped with an automatic fire alarm system.
- **G.** Automatic detection system shall be installed in accordance with the relevant standard specifications. In buildings where automatic sprinkler system is provided, the automatic detection system may not be insisted upon unless decided otherwise by the Chief Fire Officer.

**Note:** Several type of fire detectors are available in the market but the application of each type is limited and has to be carefully considered in relation to the type of risk and the structural features of the building where they are to be installed.

#### (25) Control Room

There shall be a control room on the entrance floor of the building with communication system (suitable public address system) for all floors and facilities for receiving the message from different floors. Details of all floor plans along with the details of fire fighting equipment and installation shall be maintained in the Control Room. The Control Room shall also have facility to detect the fire on any floor through indicator boards connecting fire detection and alarm system on all floors. The staff in charge of the Control Room shall be responsible for the maintenance of the various services and fire fighting equipment and installation. The Control Room shall be manned round the clock by trained fire fighting staff.

#### (26) Fire Drills and Fire Orders

The guidelines for fire drill and evacuation etc. for high-rise building shall be as per Part-IV of National Building Code. All such building shall prepare the fire orders duly approved by the Chief Fire Officer.

- (27) A qualified fire officer and trained staff shall be appointed for the following buildings.
  - **A.** All high rise buildings above 30 m. in height where covered area of one floor exceeds 1000 sq m. except apartments / group housing.

- **B.** All hotels, identified under classification three star and above category by Tourism Department and all hotels above 15 m. in height with 150 bed capacity or more without star category.
- **C.** All hospital building of 15 m. and above or having number of beds exceeding 100.
- **D.** Underground shopping complex where covered area exceeds 1000 sq. m.
- **E.** All high hazard industries.
- **F.** Any other risk which Chief Fire Officer considers necessary.
- (28) The lightening protection warning light (red) for high-rise buildings shall be provided in accordance with the relevant standard. The same shall be checked by electrical department.

#### (29) Material Used For Construction Of Building

- **A.** Combustible/flammable material shall not be used for partitioning, wall paneling, false ceiling etc. Any material giving out toxic gases/smoke if involved in the fire shall not be used for partitioning of a floor or wall paneling or a false ceiling etc. The surface frames spread of the lining material shall conform to class-I of the standard specification. The framework of the entire false ceiling shall be provided with metallic sections and no wooden framework shall be allowed for paneling/false ceiling.
- **B.** Construction features/elements of structures shall conform to National Building Code 2005 and BIS codes

#### (30) LPG

The use of LPG shall not be permitted in the high-rise building except residential/hotel/hostel/kitchen/pantry (if any) and shall be located at the periphery of the building on the ground level.

# (31) House Keeping

A high standard of house keeping shall be insisted upon by all concerned. There must be no laxity in this respect. It must be borne in mind that fire safety is dependent to a large extent upon good housekeeping.

## A. Good House-Keeping includes the following:-

- i. Maintaining the entire premises in neat and clean condition.
- ii. Ensuring that rubbish and combustible material are not thrown about or allowed to accumulate, even in small quantity, in any portion of the building. Particular attention must be paid to corners and places hidden from view.
- iii. Providing metal receptacles/waste paper basket (of non-combustible material) at suitable locations for disposal of waste. Separate receptacles must be provided for disposal of cotton rags/waste, wherever it is generated, these must under no circumstances be left lying around in any portion of the building.

- iv. Ensuring that receptacles for waste are emptied at regular intervals and the waste removed immediately for safe disposal outside the building.
- v. Ensuring that all doors/fixtures are maintained in good repairs, particular attention must be paid to self-closing fire smoke check doors and automatic fire/doors/rolling shutters.
- vi. zEnsuring that self-closing fire/smoke check doors close properly and that the doors are not wedged open.
- vii. Ensuring that the entire structure of the building is maintained in good repairs.
- viii. Ensuring that all electrical and mechanical service equipments are maintained in good working condition at all times.
  - ix. Ensuring that Cars / Scooters etc. are parked systematically in neat rows. It is advisable to mark parking lines on the ground in the parking areas near the building and in the parking area on ground floor and in basement(s); as applicable, inside the building. A parking attendant must ensure that vehicles are parked in an orderly manner and that the vehicles do not encroach upon the open space surrounding the building.

# **B.** Smoking Restrictions

- i. Smoking shall be prohibited throughout the basement(s) and in all areas where there is a profusion of combustible materials. Easily readable "NO SMOKING" signs must be conspicuously posted at locations where they can catch the eye. Each sign must also include a pictograph. The sign may also be illuminated.
- ii. In all places where smoking is permitted, ashtrays half filled with water, must be placed on each table/at each other suitable locations for safe disposal of spent smoking material. The design of the ashtrays must be such that they cannot easily topple over. If, for any reason, this is not practicable a minimum of one metal bucket or other non-combustible container half filled with water must be provided in each compartment for disposal of spent smoking materials.

# C. Limiting the Occupant Load in Parking and Other Areas of Basement

Where parking facility is provided in the basement(s) no person other than the floor-parking attendant may be allowed to enter and remain in the parking areas except for parking and removal of Cars/Scooters. Regular offices must not be maintained in the storage /parking area in the basement(s). The stores / godowns must be opened for the limited purpose for keeping or removing stores.

No person other than those on duty may be permitted in the air-conditioning plant room(s), HL/LT switch room, transformer compartment, control room pump-house, generator room, stores and records etc.

#### (32) Fire Prevention

In addition to the measures recommended above, the following fire prevention measures must be implemented when the building is in occupation.

- i. Storage of flammable substances, such as diesel oil, gasoline, motor oils, etc must not be allowed anywhere within the building. The only exception to this rule may be:
  - a. Storage of diesel oil in a properly installed tank in a fire-resisting compartment in the generator room;
  - b. Diesel oil, gasoline, motor oil etc, filled in the vehicle tanks.
- ii. Preparation of tea and warming of food must be prohibited throughout the building.
- iii. Where heaters are used during winters, the following precautions must be taken.
  - a. All heaters, except convector heaters, must be fitted with guards.
  - b. Heaters must not be placed in direct contact with or too close to any combustible material.
  - c. Heaters must be kept away from curtains to ensure that the latter do not blow over the heater accidentally.
  - d. Heaters must not be left unattended while they are switched on.
  - e. Defective heaters must be immediately removed from service until they have been repaired and tested for satisfactory performance.
  - f. Use of heaters must be prohibited in the entire basement, fire control room and in all weather maker rooms throughout the building. Also in all places where there is profusion of combustible flammable materials.
- iv. Use of candles or other naked light flame must be forbidden throughout the building, except in the offices (for sealing letters only) and kitchen. When candles/ spirit lamps are used for sealing letters/packets, extreme care must be take to ensure that paper does not come in direct contact with the naked flame and the candle/spirit lamp does not topple over accidentally while still lighted. All candles/spirit lamps kitchen fires must be extinguished when no longer required.
- v. Fluorescent lights must not be directly above the open file racks in offices/record rooms. Where this is unavoidable, such lights must be switched on only for as long as they are needed.
- vi. Filling up of old furniture and other combustible materials such as scrap paper, rags, etc. must not be permitted anywhere in the building. These must be promptly removed from the building.
- vii. More than one portable electrical appliance must not be connected to any single electrical outlet.
- viii Used stencils, ink smeared combustible materials and empty ink tubes must not be allowed to accumulate in rooms/compartments where cyclostyling is done. These must be removed and disposed off regularly.

- ix. All shutters/doors of main switch panels and compartments/shafts for electrical cables must be kept locked.
- x. Aisles in record rooms and stores must have a clear uniform width of not less than 1.0 m. Racks must not be placed directly against the wall/partition.
- xi. In record rooms, offices and stores, a clear space of not less than 30 cm. must be maintained between the top-most stack of stores/records and the lighting fittings.
- xii. A similar clearance, and at (xi) above must be maintained from fire detectors.
- xiii. Fire detectors must not be painted under any circumstances and must also be kept free from lime/distemper.
- xiv. Records must not be piled/dumped on the floor.
- xv. Welding or use of blow torch shall not be permitted inside the building, except when it is done under strict supervision and in full conformity with the requirements laid down in IS: 3016-1966 code of practice for fire precautions in welding and cutting operation.
- xvi. Printing ink/oil must not be allowed to remain on the floor, the floor must be maintained in a clean condition at all times.

# (33) Occupancy Restrictions

- **A.** The premises leased to any party shall be used strictly for the purpose for which they are leased.
- **B.** No dangerous trade/practices (including experimenting with dangerous chemicals) shall be carried on in the leased premises;
- **C.** No dangerous goods shall be stored within the leased premises.
- **D.** The common/public corridor shall be maintained free of obstructions, and the lessee shall not put up any fixtures that may obstruct the passage in the corridor and/or shall not keep any wares, furniture or other articles in the corridor.
- **E.** The penalty for contravention of the condition laid down below must be immediate termination of lease and removal of all offending materials.
- **F.** Regular inspection and checks must be carried out at frequent intervals to ensure compliance with conditions above.

# FORM - I PART – I

# **BUILDING PLAN APPLICATION FORM**

Form No.-\_\_\_\_

	Authorised Sign	ıature
	TION FOR PERMISSION FOR DEVELOPMENT OF BUILDING AND S ION OF LAND UNDER SECTION-16 OF THE ORISSA DEVELOPMEN' AUTHORITIES ACT, 1982.	
From:	For Office use only	
Name and A	Address Regd. No.	
(in Block le	etters) Scrutiny Fee	
Tel No		
_		
То	THE VICE CHAIDMAN	
	THE VICE-CHAIRMAN, BHUBANESWAR DEVELOPMENT AUTHORITY	
	BHUBANESWEAR.	
	DHUDANES WEAK.	
Madam/Sir		
	e hereby apply for permission to undertake development and carry out:-	
(a)	Construction ofstoried building.	
(b)	<u> </u>	
(c)		
(d)		toried
(e)	Sub-division of land	
(f)	(if any other please specify)	
(g)	Demolition	
(h)	(if any other please specify)	
	of Plot No Khata No Village of	
	Corporation/Municipality/NAC within the Development Plan Are var. The said land building shall be used for	a of
purpose.		
I/We enclos	sed herewith the following plans (4 copies in case of privately owned plans)	ote/ 8
copies in c	case of Govt. leased Govt. plots) and specifications duly signed by me	e and
Pood No	Engineer/ Supervisor/ Group agencybebeLicence/Empanelment No who has/have prepared the p	aring None
designs etc.	and who will supervise the developments. The building parameters che	cklist
prepared by	y the Technical person is enclosed.	

I/We the owner(s) of every part of the land/building to which this application relates, requests, permission for the above development may kindly be accorded.

# **Documents furnished.**

2.Ownership document:	Yes/No/Not applicable Yes/No/Not app	blicable
3.Supervision certificate in form-I,Part-II:	Yes/No/Not applicable	
4.Affidavit for peaceful possession of the land:	Yes/No/Not applicable	
5.Structural stability certificate:	Yes/No/Not applicable	
6.NOC from lessee in case of ease hold:	Yes/No/Not applicable	
7.NOC from Fire Prevention Officer:	Yes/No/Not applicable	
8.NOC from Airport Authority:	Yes/No/Not applicable	
9.Environmental clearance:	Yes/No/Not applicable	
10.Checklist of the proposed building:	Yes/No/Not applicable	
11.any other certificate/NOC(Please specify	y): Yes/No/Not applicable	e.
Place:		Signature of Owner(s)
Date-		Signature of Owner(s)
		Name of Owner(s)

# PART - II

# FORM FOR SUPERVISION

I hereby cer	tify that the	e develoj	pment/	erect	ion/re-	erecti	on/demolition or material alteration
in/of the	building	in re	spect	of	Plot	No.	Khata No
Village/Mou	ıza		of				Municipal
							under my supervision and I certify
that all the n	naterials (ty	pe and g	rade) a	and tl	he work	cman	ship of the work shall be generally in
accordance	with the ger	neral and	d detai	led :	specific	cation	as submitted along with and that the
work shall b	e carried ou	ıt accord	ing to	the s	anction	ed pl	ans.
						_	
							Signature of Empanelled
						Te	chnical Person
						Na	me of the Technical Person
							Address
Date:							

# PART – III

# CHECK LIST

1.	Name of the Applicant:					
2. 3. 4. 5.	Name of the Owner: Name of the Builder/Developer: Ownership documents: Established/Non established As per <u>Document</u> <u>Building Plan</u> <u>Possession</u>					
	Area:					
6.	Tenancy:- Lease hold/Free hold/Stitiban.					
	If lease hold:	(i) (ii) (iii)	Name of Lesson Purpose of lease Duration of lease	e:		
7.	Existing off site Physical Infrastructure:					
		(a) (b) (c) (d) (e) (f) (g)	Road Sewerage Drainage Water facility Availability of of Telephone Electric	drain		
8.	Nature of Construction: New Construction/Reconstruction/Addition/Alteration					
9.	(i) Amount of fee deposited					
10	(ii) Covered area on all floors					
	Use applied	se applied Land use in comprehens developmen		Whether permissible/not permissible/special consideration		
11 /		· · /D				
11. (i	) Whether first permission/Revali ii) No of floor(	dation	vised			

		(i) (ii) (iii) (iv) (v) (vi) (vii) (viii) (ix) (x)	Plan of foundate Septic tank and Recharging pit Drain Section Area statement	l Soak pit		
13.	Approach	road:-				
	(i) Nature	of roac	l			
	(ii) Wid	lth of ro	oad:-			
	As per sit	te /key j	plan	Site inspection report		
	(iii) Whether the approach road as shown connected to an existing public road in the site plan					
	(iv)			Whether such connection is available in		
	(v)			settlement sheets: Yes/No  If private, whether (a) transferred to the Municipality: Yes/No		
	(a)	indicat	ated in the not final settlement plan: Yes/No			
	(b) mentioned in the ownership document: Yes/No					
14.	other publ	ic		oposed road/proposed drain/ proposed lake/any		
15.				eter/100-300 meter of state/A.S.I. protected		
16.		-		eter radius of Important buildings(i.e. Governor I.A. and official Residence of C.M.)		

Contents of Building Plan:

12.

# 17. Building Parameters:

Category	Requirement as per norm	Approved building plan	Proposal	Remarks
1	2	3	4	5
Basement/stilt				
Ist floor				
2 <sup>nd</sup> floor				
3 <sup>rd</sup> floor				
4 <sup>th</sup> floor				
Society room				
Front set back				
Rear set back				
Left side set back				
FAR				
Parking				
Height				
No. of dwelling unit				
Population density				
No. of staircase				
No. of lift				
Recharing pit				
Scrutiny fee deposited				
Gates				
Exemptions				
(i)height				
(ii) setback				
(iii)FAR				

18.	Whether falls in the Airport funnel zone				
19.	Provision of proposed on site physical infrastructure				
	(i)	Water Supply:-			
	(ii)	Sewerage:-			
	(iii) (iv)	Drainage:- Electrical Installation:-			
20.	Clearance/C (ii)	Certificate produced: General Affidavit:-	RS/RNS/NR		
	(iii)	Structural Stability Certificate:-			
	(iv)	Form of Supervision:-			
	(v)	NOC from Fire Prevention Officer:-			

(vi) NOC from PHED:-(vii) Undertakings with regard to quality construction/Water supply/Sewerage/Drainage/Waste disposal/fire fighting Any other (specify) (viii) N:B: (RS: Required and Submitted, RNS: Required not Submitted, NR: Not Required) Involvement of Technical Person & Builder: 21. Architect/Engineer:-(i) Name:-C.A.No:-Empanelment No: (ii) Engineer/Structural Engineer:-Name: Empanelment No: Builder: (iii) Name: Empanelment No:

(iv)

Any other:

**Signature of Technical Person** 

#### FORM -II

# BHUBANESWAR DEVELOPMENT AUTHORITY

	No/BDA.,Bhubaneswar, Dated:
	under sub-section(3) of the Section-16 of the Orissa Development Authorities brissa Act,1982) is hereby granted in favour of;
Smt./ Shri_	for
(a)	Sub-division of lands
(b)	Institution of change of the use of land or building
(c)	Construction of a building
(d)	Reconstruction of building
(e)	Alteration of
(f)	Alteration or additions in the existing building
	(Specify)in respect of plot No, Khata
	Village/Mouza of
	Municipal Corporation/Municipality/NAC within the Development
Plan Area o	f subject to following additions/ restrictions.
(a)	The land/ Building shall be used exclusively
. ,	for purpose and the uses shall not be changed
	to any other use without prior approval of this Authority.
(b)	The development shall be undertaken strictly according to plans enclosed with
	necessary permission endorsement
(c)	Parking space measuring sq. m. as shown in the approved plan
` '	shall be kept open and no part of it will be built upon.
(d)	The land over which construction is proposed is accessable by an approved
` '	means of access of m. width.
(e)	The land in question must be in lawful ownership and peaceful possession of
	the applicant.
(f)	The applicant shall free gift m. wide strip of land in the
	Municipal Corporation/Municipality/ NAC for the further widening of the road
	to the standard width.
(g)	The permission is valid for period of three years with effect from the date of
,0,	issue.
(h)	Permission accorded under the provision of section 16 of ODA Act, cannot be
	construed as evidence in respect of right title interest of the plot over which the
	plan is approved.
(i)	Any dispute arising out of land record or in respect of right/ title/ interest after
	this approval the plan shall be treated automatically cancelled during the
	period of dispute.
(i)	Any other conditions.
(j)	my one conditions.

# By Order

Authorised Officer Bhubaneswar Development Authority

Bhubanesw	var Development Authority
Memo No/BDA., Bhubaneswar, Dated	
Copy along with copies of the approved p	
Bhubanesw	Authorised Officer var Development Authority
Memo No/BDA., Bhubaneswar, Dated	
Copy with a copy approved plan forwarded to the Executi Municipal Corporation/ Executive Officer, Khurda Municipality Municipality for information.	
Bhubanesw	Authorised Officer var Development Authority
Memo No/ BDA., Bhubaneswar, Dated	
Copy forwarded to the Land Officer, G. A. Department/ Director Bhubaneswar/ Enforcement Section, BDA Bhubaneswar.	of Town Planning, Orissa,
Bhubanesw	Authorised Officer var Development Authority

#### **FORM-III**

# APPLICATION FOR DRAWING OF ATTENTION UNDER SUB-SECTION (7) OF SECTION-16 OF THE ORISSA DEVELOPMENT AUTHORITIES ACT,1982

From
(Name and address of the applicant in block letters)
TO THE VICE-CHAIRMAN,
BHUBANESWAR DEVELOPMENT AUTHORITY BHUBANESWAR
Subject: Statutory Notice under sub-section (7) of Section-16 of the ODA Act,1982
I/We do bring to your kind notice that I/We had applied for permission to the Bhubaneswar Development Authority on
Yours faithfully,
Signature of the applicant(s)

## FORM-IV

# Form of Registered to be maintained under sub – section(11) AND (12) of Section-16 of the Act (See Regulation-10)

Sl. No.	Name and address of the applicant	Date of permission with letter No.	refusal	Date of endors-ement to Enforcement Branch	Date of return from Enforcement Branch	Date of sending to record room	ure of	Signature of the S.O.

#### **FORM-V**

# FORM OF NOTICE FOR COMMENCEMENT OF WORK

# (TO BE FURNISHED BY THE PLOT OWNER(S) AND THE BUILDER/DEVELOPER)

From	<u> </u>
	(Name and address in Block Letters)
ТО	THE VICE-CHAIRMAN, BHUBANESWAR DEVELOPMENT AUTHORITY BHUBANESWAR.
Sir,	
on  Engir	I/We hereby give notice of the erection of building in respect of plot Khata No Village to be commenced as per the permission given in your letter No Dated under the supervision B.D.A. empanelled Architect/Engineer/ Structural leer, Regd.No in accordance with the ved plan.
	Yours faithfully
	Signature(s) of the Owner
	Signature of Builder / Developer

### FORM – VI PART - I

# **COMPLETION CERTIFICATE**

From:
(Name and address in Block Letters)
TO THE VICE-CHAIRMAN, BHUBANESWAR DEVELOPMENT AUTHORITY BHUBANESWAR.
Sir,
I hereby certify that the development, of erection, re-erection or for material alteration in respect of the building on Plot No
Signature of Empanelled Technical Person
Name of the Technical Person
Address
Date:

#### PART - II

# CERTIFICATE FOR EXECUTION OF WORK AS PER STRUCTURAL SAFETY REQUIREMENTS

building	on	Plot	No		ction or for making Khata I	No	
Village/Mouz	a		of		Municip	al	
Corporation/M	<i>A</i> unicipal	ity/NAC	within	the	Development	Plan	Area
of	-	•			1		
(a)	structur incorpo (Structu	al design( rates the p	copy of rovisions of s  of the Nati	the drav	according to the sa vings as executed safety norms as sp ilding Code of Indi	enclosed pecified in	),which Part- 6
(b)	that the adheres	constructi to the	on has been d	d specifi	er my supervision a cations submitted	_	
Any subseque owner	ent chang	ges from the	he completion	n drawin	gs shall be the res	sponsibility	of the
Signature of o With date	wner	Sig			led Engineer/ er with date and En	npanelmen	t No.
Name:							
Address.							

## FORM - VII

# CERTIFICATE FOR STRUCTURAL STABILITY

With respect to the building work	of erection	ı, re-erec	tion or for making	alteration	n in the
building on Plot No	Khata No	)			
Village/Mouza	of		Municipal		
Corporation/Municipality/NAC	within	the	Development	Plan	Area
of, I cer	tify that the	structur	al plans and detail	s of the l	building
submitted for approval satisfy the	structural sa	fety requ	irements for all sit	uations in	ncluding
natural disasters like cyclone &ear	rth quake et	ic., as ap	plicable, as stipula	ted under	Part- 6
(Structural Design) of the National	l Building C	ode of I	ndia, 2005 and other	er relevan	t codes;
and the information given therein	ı is factuall	y correc	t to the best of a	my know	ledge. I
undertake responsibility with re	_				_
construction,(after laying of found		_	,		-
to B.D.A. regularly to effect tha		-	_	_	-
approved plan and as per the struct			-		
for action by B.D.A./Govt. if the	-	-	•		
information and the construction i					•
structural failure due to wrong /un		_	ı, use of low qualit	y materia	l and/or
poor workmanship endangering the	in-mates7p	ublic.			
Signature of owner		Sig	nature of the Regis	tered	
With date		_	gineer/ Structural E		ith date
		_	registration No.	8	
Name:					
Address.					

### FORM-VIII PERIODIC PROGRESS REPORT

(To be submitted by the Empanelled Structural Engineer/ Architect/Engineer)

From:	
TO	
10	THE PLANNING MEMBER, BHUBANESWAR DEVELOPMENT AUTHOIRITY, BHUBANESWAR.
Ref	BDA approval letter NoDated
has been sanctioned been done are strictly Building C will be res	I/We hereby certify that the construction of the building up to foundation, and floor/floors of the building plot No Village/Mouza supervised by me/us and has been constructed strictly conforming to the plan and structural design as per the provision of NBC, 2005. The work has to my/our best satisfaction. All the materials used in construction of this building in accordance with BIS/ISI specifications and norms conforming to National Code, 2005 covering all the safety factors including earthquake and cyclone. I/we ponsible and liable for action by BDA/Govt. if there is any structural failure and gering the inmates and public.
	Yours faithfully,
	Signature of the Architect/Engineer
	Name
	Empanelment No.
	Signature of Structural Engineer
	Name Empanelment No.

### FORM-IX BHUBANESWAR DEVELOPMENT AUTHORITY

No	/ BDA, Bhubaneswar, Dated th
ORI	USAL OF PERMISSION UNDER SUB-SECTION (3) OF SECTION 16 OF SSA DEVELOPMENT AUTHORITIES ACT-1982 FOR UNDERTAKING ELOPMENT OF PLOT NO IN MOUZA
To,	
	SMT/SRI
	Your reply to this office letter No
No	Hence, in exercise of the powers under Sub-Section (3) of section-16 of the Orissa elopment Authority Act, 1982, permission to undertake development on plot
2	
4	
	copies of the plans are retained in this office for record and reference and the rest are ned herewith.
	BY ORDER
	AUTHORISED OFFICER
Mem	no No BDA, Bhubaneswar, Dated
Copy plots	to Municipal Commissioner, BMC/Director of Estates, G.A. Deptt. (in case of lease).

**AUTHORISED OFFICER** 

#### FORM - X

#### **OCCUPANCY CERTIFICATE**

		on, re-erection or fo			-
		Village/Mouza		i	s completed under
the	supervision	of	Arc	hitect	(Empanelment
No	)		Structural	Enginee	er (Empanelment
No		) Supervisor		, (E	Empanelment No.
	) as 1	per the Completion	certificate subn	nitted. O	n inspection it is
observed	that the erection	re-erection or altera	ntion undertaken v	with respe	ect to above plot(s)
conform/	do not conform	n the approved pla	an and the cond	litions in	posed vide letter
No	dt	The build	ling is permitted/i	not permi	tted for occupation
for	occupanc	y subjected to the fo	llowing	-	-
1.					
2.					
3.					
One set o	f completion plan	ns duly certified is re	turned herewith.		
					BY ORDER

Authorised Officer Bhubaneswar Development Authority

#### **FORM-XI**

#### INDEMNITY BOND FOR BASEMENT

This Indemnity Bond is exe	cuted by Shri/Smt	S/O,D/O,W/C
Shri/Smt	R/O	in
favour of Development Authori	ity.	
Whereas the executant has su	ibmitted to the concerned Authori	ty the plans for, sanction of
basement over Plot No	Mz/Vill und	der the provisions of the Act
and and Rules and Building Re	egulations made there under:-	_
<del>_</del>	=	

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

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

#### Now this deed witnesses:

- 1. That in consideration of the sanction of the plans by BDA for construction of the basement the executant undertakes that he/she shall at all times keep BDA free from any liability, loss or damages/flowing from any injury or damage caused to the adjoining built-up properties or to any person as a consequence of the construction of at the time of digging of its foundations or during the course of its construction or at any time thereafter.
- 2. The owner agreed and undertakes that in the event of any claim being made by any person or persons against the concerned Authority either in respect of the sanction granted by the concerned Authority to the owner for the construction of basement or in respect of the construction or manner of construct ion of the basement by the owner of the consequences flowing from the said sanction the executant shall be responsible and liable and not BDA.
- 3. The executant agrees and undertake to indemnify the concerned Authority fully in respect of any amount which the concerned Authority may be required to pay to any person either by way of compensation or on any other account as a result of any claim or suit or any other proceedings concerning the sanctioning of the construction of the basement of the making thereof and also in respect of the costs and expenses which the concerned Authority may incur on defending any action.
- 4. Without prejudice to the above undertaking the executant hereby binds itself to pay to BDA to the full extent any amount which BDA may be required to pay to any person in connection with, relating to or concerning the sanctioning of the basement or the making thereof.

	herein before	contained.	·	•		
	whereof the executant al		has signed	this bond on	this	day
					Inc	demnifier
Witness:						
(Signatures	s)	-				
	1. Name		<del></del>			
	Full Address					
	(Signatures)					
	2. Name					
	Full Address					
	(Signatures)					

5. The owner agrees and undertakes that this bond shall remain in full force and effect till the executant faithfully observes/performs the undertaking

#### **FORM-XII**

# INTIMATION REGARDING APPROVAL OF RESIDENTIAL BUILDING PLAN BY TECHNICAL PERSON EMPAANELLED BY THE AUTHORITY IN RESPECT OF PLOTS NOT EXCEEDING 300 SQM IN SIZE {See Regulation-9(8) }

	{See Regulation-9(8) }
From:	
То	
7	THE PLANNING MEMBER,
F	B.D.A.,BHUBANESWAR.
Ref:	
Sir/Mad	am,
I	Wish to intimate that I have approved the residential building plan of
Sri	(address) in respect of plot No Mz-
ur	nder the provisions of 9(8) B.D.A. (Planning & Building Standard Regulation)-2008
The info	ormation in respect of the plan and plot is given below.
1. N	Name of the Owner:-
(	i)Present Address: (in Block letters)
	Village:-
	Po:-
	PS:-
	Dist:-
(	ii)Permanent address: (in Block letters)
	Village:-
	Po:-
	PS:-
	Dist:-
2.	Name of Mouza:
3.	Plot No:
4.	Khata No:
5.	Kisam of Plot:
6.	Area of the plot(in Sqm):

7.	No. of floors:				
8.	Approach road:				
	(a) Width:				
	(b) Public/Private:				
9.	Details of lay out approved by the Authority				
	(i) Letter No, Date of approval:				
	(ii) Khata No & Plot No:				
	(iii) Village:				
	(iv) Municipal Corporation/Municipality/NAC:				
	(v) Development plan area:				
	(vi) Name of the applicant/builder/developer:-				
10.	Details of allotment made by G.A.Deptt./BDA/OSHB				
	(i) Drawing No:				
	(ii) Name of Scheme:				
	(iii) Village:				
	(iv) Municipal Corporation/Municipalaity/NAC:				
	(v) Development Plan area:				
11	Use:				
12.	Floor-				
13.	Covered area (in Sq.ft)				
	Stilt floor:				
	Ground floor:				
	First floor:				
	Second floor:				
	Other floors:				
14.	Set backs (in Sq.ft)				
	Front set back				
	Rear Set back				
	Left side set back-				
	Right side set back				
15.	Height of the Building:				

- 16. Source of water supply:
- 17. Proposed drainage:
- 18. F.A.R.
- 19. Parking space

Yours faithfully,

Name & Designation of the Registered Architect /Engineer Empanelment No

Signature of plot owner/Developer with present & permanent address:

#### **FORM-XIII**

## APPLICATION FOR DRAWING OF ATTENTION UNDER REGULATION- 68

From:	
То	
	THE VICE-CHAIRMAN BHUBANESWAR DEVELOPMENT AUTHORITY BHUBANESWAR.
Subject:	Statutory Notice under Regulation-68.
Madam/Sir,	
to the Bhu No,Kh corporation/ N occupancy ce I/We have not notice that if v you, no comr	Municipality/ NAC within Development Plan area of for issue of rtificate. Two months have elapsed since the submission of application and treceived any communication with respect to the said application. Please take within a further period of two months from the date of receipt of this notice by munication either granting or refusing occupancy certificate is received by shall presume that issue of occupancy certificate as applied for has been
	Signature of the applicant(s)
	By order
	Bhubanswar Development Authority

Secretary
Bhubaneswar Development Authority
Bhubaneswar