

ANDHRA PRADESH APARTMENTS (PROMOTION OF CONSTRUCTION AND OWNERSHIP) RULES, 1987

CONTENTS

1. Short Title and Commencement
2. Definitions
3. Manner of making disclosure
4. Copies of certain documents to be given
5. Particulars to be contained in the agreement
6. The manner of executing the agreement deed
- 7 . Period of submission of application for registration of Co-operative Society or Company of flat or apartment purchasers
8. Period of Conveyance of title of Promoter to Organisation of flat or apartment purchasers
9. Promoter to maintain separate account of sums taken as advance or deposit and to be trustee therefor and disburse them for purpose for which given
10. Manner of making disclosure
- 1 1 . Responsibility for payment of outgoings till property is transferred
12. The Form of declaration to be filed before competent authority by the promoter or the Manager or Board or Managers of the Association of apartment owners
13. Bye-laws for the Association of Apartment Owners
14. Declaration deeds of Apartments and copies of floor plans to be registered
- 1 5 . Fire protection requirements for apartment buildings or buildings with flats more than 15 M. in Height

ANDHRA PRADESH APARTMENTS (PROMOTION OF CONSTRUCTION AND OWNERSHIP) RULES, 1987

In exercise of the powers conferred by sub-section (1) of Section 33 of the Andhra Pradesh Apartments (Promotion of Construction and Ownership) Act, 1987 (Act No.29 of 1987) the Governor of Andhra Pradesh hereby makes the following Rules:

1. Short Title and Commencement :-

- (1) These rules may be called the Andhra Pradesh Apartments (Promotion of Construction and Ownership) Rules, 1987.
- (2) They shall come into force on the 17th August, 1987.

2. Definitions :-

(1) In these rules, unless the context otherwise requires

(a) "Act" means the Andhra Pradesh Apartments(Promotion of Construction and Ownership) Act, 1987 (Act No.29 of 1987);

(b) "Form" means a form appended to these rules;

(c) "Section" means a section of the Act.

(2) Words and expressions used in these rules but not defined herein shall have the meanings respectively assigned to them in the Act.

3. Manner of making disclosure :-

(1) A promoter for the purpose of making disclosure of any document referred to in section 4 shall produce the original of such document before the person intending to take or taking one or more flats or apartments. Such person may ask the promoter all relevant questions for seeking further information or clarification in respect of any document or matter required to be disclosed, produced or furnished by or under the provisions of the Act and the promoter shall be legally bound to answer all such questions to the best of his knowledge and belief.

(2) The promoter while making disclosure of the outgoings as required by clause (f) of sub-section (1) section 4 shall state the basis on which any estimated figures or other information is given.

(3) The promoter shall display or keep all documents, plans, specifications, (or copies thereof) referred to in clauses (a),(b),(c) and (d) of sub-section (1) of section 4 of the site and permit inspection thereof.

(4) The promoter shall, when the flats are advertised for sale, disclose interalia, in the advertisement the particulars as required by clause (a),(b),(c) and (d) of sub-section (1) of section 4 and also the following particulars:

(i) the extent of the carpet area of the flat or apartment including the area of the balconies which should be shown separately;

(ii) the price of the flat or apartment including the proportionate price of the common areas and facilities which should be shown separately to be paid by the purchaser of the flat or apartment and

the intervals at which the installments thereof may be paid.

(iii) the nature, the extent and the description of the common areas and facilities and;

(iv) the nature, extent and description of limited common areas and facilities if any.

4. Copies of certain documents to be given :-

A promoter shall on demand and payment of a reasonable charge therefor, give to any person intending to take or taking one or more flats or apartments, true copies of the following documents namely:

(a) all documents of title relating to the land on which the flats or apartments are constructed, or are to be constructed, which are in the promoters possession or power;

(b) the certificate by an Attorney-at-law or Advocate as indicated in AnnexureA under FormI.

(c) all documents relating to encumbrance (if any) on such land, including any right,title, interest or claim, of any party in or over such land;

(d) the plans and specifications of the building built or to be built on the land referred to in clause (c) of subsection (1) of Section 4.

(e) a list of fixtures, fittings and amenities (including the provision for one or more lifts) provided or to be provided for the flat or apartments.

(f) a list of flats or apartments with their members already taken or agreed to be taken, and the name and addresses of the parties and the price charged or agreed to be charged therefor, and the terms and conditions if any on which the flats or apartments are taken or agreed to be taken;

(g) full and true disclosure in writing of all outgoings, including ground rent if any, municipal or other local taxes, taxes on income, water and electricity charges, revenue assessment, interest on any mortgage or other encumbrances, if any, and the basis on which any estimated figures or other information is given to the person intending to take or taking the flat or apartment.

5. Particulars to be contained in the agreement :-

(1) The agreement prescribed in section 5 of the Act shall contain interalia the particulars referred to in sub-rule(2) and to such agreement there shall be attached copies of the documents specified in sub-rule(3) of this rule.

(2) Particulars:

(i) If the building is to be constructed, the liability of the promoter to construct it according to the plans and specifications approved by the local authority or Urban Development Authority where such approval is required under any law for the time being in force;

(ii) the date by which the possession of the flat or apartment is to be handed over to the purchaser;

(iii) the extent of the carpet area of the flat or apartment including the area of the balconies which should be shown separately;

(iv) the price of the flat including the proportionate price of the common areas and facilities which should be shown separately to be paid by the purchaser of flat or apartment, and the intervals at which instalments thereof may be paid.

(v) the precise nature of the organisation to be constituted of the persons who have taken or to take the flats or apartments.

(vi) the nature, extent and description of the common areas and facilities.

(vii) the nature, extent and description of limited common areas and facilities if any;

(viii) percentage of undivided interest in the common areas and facilities if any, appertaining to the flat or apartment agreed to be sold;

(ix) percentage of undivided interest in the limited common areas and facilities, if any appertaining to the flat or apartment agreed to be sold;

(x) statement of the use for which the flat or apartment is intended and restriction on its use, if any.

(3) Copies of documents to be attached to the agreement.

(i) The certificate by an Attorney-at-Law or Advocate as indicated in Annexure-A of Form-I.

(ii) the extent of village surveys or any other relevant revenue and Municipal records showing the nature of the title of the promoter to the land on which flats or apartments are constructed or are to be constructed;

(iii) the plans and specifications of the flat or apartment as approved by the local authority or Urban Development Authority.

6. The manner of executing the agreement deed :-

The promoter shall, before accepting any advance payment or deposit, enter into an agreement with the flat or apartment purchaser in Form-I containing particulars specified in sub-rule

(2) of rule 5 and shall attach thereto the copies of the documents specified in sub-rule (3) of rule 5.

7. Period of submission of application for registration of Co-operative Society or Company of flat or apartment purchasers :-

(a) Where a Co-operative society or a company of the persons taking the flats or apartments is to be constituted, the promoter shall submit an application to the Registrar of Co-operative Societies or Companies for registration of the Co-operative society or the company, as the case may be, within four months from the date on which the minimum number of persons required to form such organisation have taken flats.

(b) Where the flat or apartment takers propose to submit the flats or apartments to the provisions of section 2 and Chapter III of the Andhra Pradesh Apartments (Promotion of Construction Ownership) Act, 1987 by executing and registering, declarations of Apartments of flats as required under the Act, the promoters shall inform the Registrar of Co-operative Societies or Registrar of Companies, as the case may be, as soon as possible after the date on which all the flat or apartment owners of required number have executed such declarations of Apartments.

8. Period of Conveyance of title of Promoter to Organisation of flat or apartment purchasers :-

If no period for conveying the title of the promoter to the organisation of the flat or apartment purchasers is agreed upon, the promoter shall (subject to his right to dispose of the remaining flats or apartments, if any) execute the conveyance within four months from the date on which the Co-operative Society or the Company is

registered or, as the case may be, the association of flat or apartment takers is duly constituted. When a promoter has submitted his property to the provisions of the Andhra Pradesh Apartments (Promotion of Construction and Ownership) Act, 1987 by executing and registering a declaration as required in Section 2 and Chapter III of the Act, and no period of conveying the title of the promoter in respect of any flat or apartment to each flat or apartment taker is agreed upon, the promoter shall execute the conveyance deed of flat or apartments, in favour of each flat or apartment taker within four months from the date the flat or apartment taker has entered into possession of his flat or apartment.

9. Promoter to maintain separate account of sums taken as advance or deposit and to be trustee therefor and disburse them for purpose for which given :-

The promoter shall maintain a separate account in any Scheduled bank of sums taken by him, from persons intending to take or who have taken flats or apartments, as advance or deposit, including any sum so taken towards the outgoings (including the ground rent if any, municipal or other local taxes, taxes on income, water charges, electricity charges, revenue assessment, interest on any mortgage or other encumbrances, if any) and he shall hold the said moneys for the purposes for which they were given and shall disburse the moneys for those purposes and shall on demand by the competent authority or any officer authorised by him or by a special order by the Government for the purpose, make full and true disclosure of all transactions in respect of that account.

10. Manner of making disclosure :-

(1) For the purpose of making disclosure of all transactions in respect of the account referred to in rule 9 or for making disclosure of information and documents in the manner prescribed in these rules, a promoter shall produce before the competent authority or an officer authorised by him, the following documents in relation to such account within such time as that competent authority or authorised officer may fix in that behalf, namely: The Cash book The General ledger, The Personal ledger, The Nominal Accounts, The Receipts of Advances and Deposits, The Vouchers of Expenditure, Bank Pass Book, The Register of Flat purchasers or apartment takers. The Register of Flats or apartments, The Statement indicating Receipts and Disbursements (General) The

Statement indicating Receipts and Disbursement of individual Accounts.

(2) The Registers of Flat purchasers or Apartment Takers and the Register of Flats or Apartments shall be in Form No. II and III or respectively and the statement at serial numbers 10 and 11 in sub-rule (1) may be maintained according to the trade practice.

11. Responsibility for payment of outgoings till property is transferred :-

A promoter shall while he is in possession and where he collects from persons who have taken over flats or apartments or are to be taken over flats or apartments for the payment of outgoings even thereafter, pay all outgoings (including ground rent, Municipal or other local taxes, taxes on income, Water charges, Electricity charges, Revenue assessment, interest on any mortgage or other encumbrances if any) until he transfers the property to the persons taking over the flats or apartments, or to the organisation of any such persons.

12. The Form of declaration to be filed before competent authority by the promoter or the Manager or Board or Managers of the Association of apartment owners :-

The memorandum of declaration required to be filed by the sole owner or all the owners thereof for the purpose of section 2 and section 14 of the Act shall be in Form-IV.

13. Bye-laws for the Association of Apartment Owners :-

The Byelaws for the formation and functioning of the Association of Apartment Owners and the Administration and maintenance of every property shall be as indicated in Form 7V.

14. Declaration deeds of Apartments and copies of floor plans to be registered :-

(1) As required by Section 17 of the Act, all instruments relating to the Declaration and all amendments thereto and the Deeds of Apartment in respect of each apartment and the floor plans of the building referred to in sub-rule (2) shall be registered under the Indian Registration Act, 1908.

(2) Simultaneously with the registration of the instruments of Declaration there shall be filed along with it a set of the floor plans of the building showing the layout location, apartment numbers and dimensions of the apartments, stating the name of the building

or that it has no name, and bearing the verified statement of the Commissioner of the Municipal Corporation or the Vice-Chairman of the Urban Development Authority concerned certifying that it is an accurate copy of portions of the plans of the building as filed with and approved by the local authority of the Urban Development Authority within whose jurisdiction the building is located.

(3) In all registration offices a book called "Register of Declaration and Deeds of Apartments under the A.P. Apartments (Promotion of Construction and Ownership) Act, 1987 and Index relating thereto shall be kept. The book and the Index shall be kept in such form and shall contain such particulars as indicated in the Form Nos. VI, VII and VIII.

(4) It shall be the duty of every manager or board of managers to send to the Sub-Registrar of the area concerned in which the property containing the apartment is situated, or if there is no subregistrar for the area, to the Registrar of the District in which such property is situated, a certified copy of the Declaration and Deed or Apartment made in respect of every apartment contained in the building forming part of the property together with a memorandum containing such particulars as are indicated in Form No. IV.

(5) The Sub-Registrar, or as the case may be, the Registrar shall register the Declaration along with floor plans of the building and the Deed of Apartment in the Register of Declarations and Deeds and Apartments under the Andhra Pradesh Apartments (Promotion of Construction and Ownership) Act, 1987, and shall also enter particulars in the Index kept under sub-rule (3). Any person acquiring any apartment or any apartment owner shall be deemed to have notice of the Declaration and of the Deed of Apartment from the date of its registration under this section.

15. Fire protection requirements for apartment buildings or buildings with flats more than 15 M. in Height :-

(1) GENERAL: In addition to the provisions of Part IV Fire Protection of National Building Code of India, the Chief Fire Officer of the area, may insist on suitable provisions in building from fire safety and fire fighting of view depending on the occupancy and height of buildings.

(2) CONSTRUCTION BUILDING MATERIALS:

(a) Load bearing elements of construction and elements of construction for which the required fire resistance is one hour or more shall be of noncombustible material interior finish materials (wall panellings, Floor coverings, etc) may be permitted of materials having their rating for frame spread and smoke developed not exceeding a very low frame spread limit in accordance with IS: 1642 1960 (class I) ceiling linings shall be of non-combustible or of plasterboard.

(b) Stairways and corridors shall not contain combustible materials, structural members such as supports and bearing walls shall have fire resistance rating of 3 hours transoms and ceiling 2 hour to 4 hours.

(c) Internal walls and partitions separating corridors from areas of floor that are used for any purpose other than circulation shall have a fire resistance of not less than one hour. There shall be no openings in such walls other than for doors or delivery hatches with fire resistance not less than half an hour to one hour. Fire sections (fire walls) sub-dividing the building to prevent fire spread shall have a fire resistance rating not less than two hours.

(d) Facades shall consist of non-combustible building materials. A fire must bridge a distance of at least 0.9 meters between storeys.

(3) STAIRCASE ENCLOSURES FOR BUILDINGS MORE THAN 15 IN HEIGHT:

(a) The internal enclosing walls of staircase shall be of brick or R.C.C. construction having fire resistance of not less than two hours. All enclosing staircases shall be reached via ventilated lobby and shall have access through self closing doors of at least half an hour fire resistance. There shall be single swing doors opening in the direction of the escape. The door shall be fitted with check action door closers.

(b) The staircase enclosure on external wall of the building shall be ventilated to atmosphere at each landing.

(c) Permanent vent at the top equal to 5% of the cross sectional area of the enclosure and openable sashes at each floor level with area equal to 15% of the cross sectional area of the enclosure on the external wall shall be provided. The roof of the shaft shall be at least 1 m. above the surrounding roof. There shall be no glazing or glass bricks in any internal enclosing wall of a staircase. If the

staircase is in the core of the buildings and cannot be ventilated at each landing a positive pressure of 5MM w.g. by an electrically operated blower/blowers shall be maintained.

(d) The mechanism for pressurising as staircase shaft be so installed that the same shall operate automatically and also with manual operation facilities, when the automatic fire alarm operates.

(4) LIFT ENCLOSURES

(a) The walls enclosing lift shaft shall have a fire resistance of not less than two hours. Shafts shall have permanent vent at the top not less than 1800 s.q.m. (0.2 sq.m.) in clear area. Lift motor rooms shall preferably be sited at the top of the shaft and shall be separated from lift shafts by the enclosing wall of the shaft or by the floor of the motor rooms.

(b) Landing doors in lift enclosures shall open in the ventilated or pressurised corridor lobby.

(c) The number of lifts is one lift bank shall not exceed four shaft for fire lift in a lift bank shall be separated from each other by a brick masonry or R.C.C. wall of fire resistance of not less than two hours.

(d) If the lift shaft and lift lobby are in the core of the building a positive pressure of not less than 2.5 MM and not more than 3 MM w.g. by an electrically operated blower/blowers shall be maintained in the lift lobby and positive pressure of not less than 5 MM w.g. shall be maintained in the lift shaft. The mechanism for pressuring the lift shaft and lift lobby shall be so installed that they shall operate automatically when the automatic fire alarm operates.

(e) Exits from the lift lobby if located in the core building shall be through a self closing smoke stop door of half hour fire resistance.

(f) The Lift machine room shall be separate and no other machinery shall be installed therein.

(g) Lifts shall not normally communicate with the basement. However one of the lifts may be permitted to reach the basement level provided the lift lobby at each basement level is pressurised and separated from the rest of the basement areas by smoke actuated fire resisting door of two hours fire resistance. These doors can also be kept in hold open position by an electro magnet device to be linked with smoke detector.

(5) EXTERNAL WINDOWS: Areas of the openable external windows on a floor shall be not less than 2-1/2 of the floor area. The locks for these windows shall be fitted with budget lock of the carriage day type (which can be opened with the of firemens axe).

(a) Each basement shall be separately ventilated. Vents with cross sectional area (aggregate) not less than 2.5% of the floor area spread evenly round the perimeter of the basement shall be provided in the form of grills or breakable stall boards lights or pavement lights or by way of shafts. Alternatively, a system of air inlets shall be provided at basement floor levels and smoke outlets at basements ceiling level. Inlets and extracts may be terminated at ground level with stall boards or pavement lights as before but ducts to convey fresh air to the basement floor level have to be laid stall boards and pavement lights should be in positions easily accessible to the Fire bridge and clearly marked SMOKE OUTLET or AIR INLET with an indication of areas served at or near the opening.

(b) The staircase of basements 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 storeys of the building and shall communicate with basement through a lobby provided with fire resisting self closing doors of one hour fire resistance. If the travel distance exceeds 18.50 m. additional staircase at proper places shall be provided.

(c) In multi storeys basements intake ducts may serve all basement levels but each basement and compartment shall have separate smoke outlet duct or ducts.

(d) Mechanical extractors for smoke venting system from lower basement levels shall also be provided; the system shall be of such design as to operate on actuation of heat sensitive detectors or sprinklers if installed and shall have considerably higher performance than the standard units. It should also have an arrangement to start it manually and shall be designed to function at a temperature not less than 55oC.

(e) Kitchen working on gas fuel, departmental stores and shops shall not be permitted in basement/sub-basement.

(6) COMPARTMENTATION (FIRE SECTIONS) If the

uncompartmented floor space on a floor exceeds 750 sq.m it shall be separated in compartments each not exceeding 750 sq.m by means of fire walls of not less than two hour fire resistance. In extended buildings, fire walls should be erected at distances not exceeding 40 meters. For floors with sprinklers, the area mentioned above may be increased by 50 percent.

(7) SERVICE DUCTS:

(a) Service ducts shall be enclosed by walls having a fire resistance of not less than two hours. Doors for inspection of access shall also have a fire resistance not less than two hours.

(b) If the cross sectional area exceeds 1 sq.m it shall be sealed where it passes a floor by carrying the floor through the duct. The floor within the duct shall be pierced for any service pipe or ventilation trunk and shall fit as closely as possible around any such pipe or trunk.

(c) A permanent vent shall be provided at the top of the service shaft or cross sectional area of not less than 460 sq.m or 6.25sq.m for each 900 sq.cm of the area of the shaft whichever is more.

(8) REFUSE CHUTES and REFUSE CHAMBERS (a) Hoppers to refuse chutes shall be situated in well ventilated position and chutes shall be continued upwards with an outlet above roof level and with an enclosure wall of non combustible material with fire resistance not less than two hours. The hoppers shall not be located within the staircase enclosure. (b) Inspection panel and hopper (charging station) opening shall be fitted with tight fittings metal doors, covers, having a fire resistance of not less than one hour. (c) Refuse chutes shall not be provided in staircase walls, air conditioning shafts etc. (d) Refuse chambers shall have walls and floors or roofs constructed of noncombustible and impervious material and shall have a fire resistance of not less than two hours. They shall be located at a safe distance from exit routes.

(9) BUILDING SERVICES

(a) ELECTRICAL SERVICE:

(i) The electric distribution cables/wiring shall be laid in separate duct. The duct shall be sealed at every alternative floor with non-combustible materials having the same fire resistance as that of the duct.

(ii) Water mains, telephone lines, inter-com-lines, gas pipes or any other service line shall not be laid in the duct for electric cables.

(iii) Separate circuits for water pumps, lifts, staircases and corridor lighting and blowers for pressurising system shall be provided directly from the main switch gear panel and these circuits shall be laid in separate conduct pipes so that fire in one circuit will not affect the other. Master switches controlling essential services circuits shall be clearly labelled.

(iv) The inspection panel doors and any other opening in the shaft shall be provided with air tight fire doors having the fire resistance of not less than two hours.

(v) Medium and low voltage wiring running in shafts, and within false ceiling shall run in metal conduct.

(vi) 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 electric supply from the licenses service and alternate supply cables. The door provided for the service room shall have fire resistance of not less than two hours.

(vii) If the lincensees agree to provide meters on upper floors, the licenses cables shall be seggregated from consumers cable by providing a partition in the duct. Meter rooms on upper floors shall not open into staircase enclosures and shall be ventilated directly to open air outside.

(viii) PVC cables should have an additional sheathing or protection provided by compounds sprayed on after installation because of the notorious secondary damage in case of fire.

(b) ROWN GAS/LP GAS SUPPLY PIPES Where gas pipes are run in the building, the same shall be run in separate shafts exclusively for this purpose and these shall be on external walls, away from the staircases. There shall be no interconnection of this shaft with in the rest of the floors. Gas meters shall be housed in a suitably constructed metal cupboard located at well ventilated space at ground level.

(c) STAIRCASE CORRIDOR LIGHTINGS

(i) The staircase and corridor lighting shall be on separate circuit and shall be independently connected so as it could be operated by

one switch installation on the ground floor easily accessible to fire fighting staff at any time irrespective of the position of the individual control of light points, if any.

(ii) For assembly, institutional buildings, the alternative source of supply may be provided by battery continuously trickle charged from the electric mains.

(iii) Suitable arrangements shall be made by installing double throw switches to ensure that the lighting installed in the staircase and the corridor do 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.

(iv) Emergency lights shall be provided in the staircase corridor for assembly, and institutional buildings.

(d) ALTERNATE SOURCE OF ELECTRIC SUPPLY: A stand by electric generator shall be installed to supply power to staircase and corridor lighting circuits, fire lifts, the stand by fire pump, Pressurisation fans and blowers smoke extraction and damper system in case of failure of normal electric supply. The generator shall be capable of taking starting current of all the machines and circuits stated above simultaneously. If the stand by pump is driven by diesel engine, the generator supply need not be connected to the stand by pump. Where parallel/HV/LV supply from a separate substation is provided with appropriate transformer for emergency the provisions of generator may be waived in consultation with the Chief-Fire Officer of the area.

(e) TRANSFORMERS:

(i) If transformers are housed in the building below the ground level it shall be necessarily in the first basement in separate fire resisting room of 4 hours rating. The room shall necessarily be at the periphery of the basement. The entrance to the room shall be provided with a steel door of 2 hours fire rating kerb (sill) of a suitable height shall be provided at the entrance in order to prevent the flow of oil from ruptured transformer into other parts of the basement. The direct access to the transformer room shall be provided preferably from outside. The switch gears shall be housed in a separate room separated from the transformer bays by a fire resisting wall with fire resistance not less than four hours.

(ii) Transformer, if housed in basement, shall be protected by an

automatic high pressure water spray system (multifyre system).

(iii) In case the transformers housed in the basements are totally segregated from the other areas of the basement by 4 hours fire resisting wall/walls with an access directly from outside it may be protected by carbondioxide or B.C.F fixed installation system.

(iv) When housed at ground floor level it/they shall be cut off from the other portion of premises by fire resisting walls of 4 hours fire resistance.

(v) They shall not be housed on upper floors.

(vi) A tank of RCC construction of capacity capable of accommodating entire oil of the transformers shall be provided at lower level, collect the oil from the catch-pit in case of emergency. The pipe connecting the catch-pit to the tank shall be of non-combustible construction and shall be provided with flame arrester.

(f) AIR-CONDITIONING

(i) Escape routes like staircase, common corridors, lifts, lobbies etc shall not be used as return air passage.

(ii) The ducting shall be constructed of substantial guage metal in accordance with IS: 655-1963 Metal Air DUCTS (Revised).

(iii) Wherever the ducts pass through fire walls or floors the opening around the ducts shall be sealed with fire resisting materials such as asbestos rope, vermiculite concrete glass wool etc.

(iv) As far as possible metallic ducts shall be used even for the return air instead of space above the false ceiling.

(v) The materials used for insulating the duct system (inside or outside) shall be of non-combustible materials such as glass wool, spunglass with neoprene facing.

(vi) Area more than 750 sq.m on individual floor shall be segregated by a fire wall and automatic fire dampers for isolation shall be provided where the ducts pass through fire walls. The fire dampers shall be capable of operating manually.

(vii) Air ducts serving main floor areas, corridors etc., shall not pass through the staircase enclosure.

(viii) The air handling units shall, as far as possible be separate for each floor and air ducts for every floor shall be separate and in no

way interconnected with the ducting of any other floor.

(ix) If the air handling unit serves more than one floor, the recommendations given above shall be complied with in addition to the condition given below:

(x) Proper arrangements by way of automatic fire dampers working on smoke detectors for isolating all ducting at every floor from the main riser shall be made.

(xi) When the automatic fire alarm operation the respective air handling units of the air conditioning system shall automatically be switched off.

(xii) Automatic fire dampers shall be provided at the inlet of the fresh air duct and the return air duct of each compartment on every floor.

(xiii) Automatic fire dampers shall be so arranged so as to close by gravity in the direction of the air movement and to remain tightly closed upon operation of a smoke detector.

(xiv) The air filters of the air handling units shall be of non combustible materials.

(xv) The air handling unit room shall not be used for storage of any combustible materials.

(xvi) Inspection panels shall be provided in main trunking to facilitate the cleaning of ducts of accumulated duct and to obtain access for maintenance of fire dampers.

(xvii) No combustible material shall be fixed nearer than 15 cm. to any duct unless such duct is properly enclosed and protected with noncombustible material (glass wool or sunglass with neoprene facing enclosed and wrapped with aluminum shetting) at least 3.2 m. thick and which would not readily conduct heat.

(g) BOILER ROOM: Provisions of Boiler Room shall conform to Indian Boiler Act, further, the following additional aspects may be taken into account in the location of Boiler/Boiler Room.

(i) The boilers shall not be allowed in sub-basement but may be allowed in the basements the escape routes.

(ii) 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.

(iii) Entry to this room shall be provided with composite door of 2 hours fire resistance.

(iv) The boilers room shall be provided with fresh air inlets and smoke exhausts directly to the atmosphere.

(v) 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 the boiler room in case of tank rupture.

(vi) 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.

(h) PROVISION OF FIRST AID FIRE FIGHTING APPLIANCES:

(i) The first aid fire fighting equipment shall be provided on all floors including basements, lifts rooms, etc., in accordance with IS: 2217 1963 recommendations for providing First Aid Fire Fighting Arrangements in Public Buildings consultation with the Chief Fire Officer, of the area.

(ii) The Fire Fighting appliances shall be distributed over the building in accordance with IS: 2190 1971 Code of Practice for selection, installation and maintenance of portable first aid fire appliances.

(i) **FIXED FIRE FIGHTING INSTALLATIONS** Building above 15 M in height depending upon the occupancy use shall be protected by wet riser, wet riser cum down comer, automatic sprinkler installation, high pressure water spray or foam generating system etc., as per details given in rules 4 (b) to 14 (f) and as indicated in table in Annexure I. (See fig 2 in Annexure III)

(j) **STATIC WATER STORAGE TANK:** A satisfactory supply of water for the purpose of fire fighting shall always be available in the form of underground static storage tank with capacity specified in Appendix "A" for each building by the local fire Authority with arrangements of replenishment by ground main or alternative source of supply at 1000 litres per minute. The static storage water

supply required for the above mentioned purpose should entirely be accessible to the fire engines of the local Fire Service. Provision of suitable number of manholes shall be made available for inspection, repairs and inspection of suction house etc. The covering slab shall be able to withstand the vehicular load of 18 tons. The domestic suction tank connected to the static water storage tank shall have an over flow capable of discharging 2250 litres per minute to a visible drain from which by a separate conduits, the overflow shall be conveyed to storm water drain. To prevent stagnation of water in the static water storage tank, the suction tank of the domestic water supply shall be fed only through an overflow arrangement to maintain the level therein at the minimum specified capacity (See Annexure-II) The static water storage tank shall be provided with a fire brigade collecting breaching with 4 Nos. 63 mm. dia. (2 Nos. 63 mm. dia. for pump with capacity of 1400 litres/minute) instantaneous male inlets arranged in a valve box at a suitable point at a street level and connected to the static tank by a suitable fixed pipe not less than 15 cm dia to discharge water into the tank when required at a rate of 2250 litres per minute.

(k) AUTOMATIC SPRINKLERS: Automatic Sprinklers shall be installed:

(i) In basement used as car parks, if the area exceeds 500 sq.m.

(ii) In multistoreyed basements used as car parks, and for housing essential services ancillary to a particular occupancy.

(iii) Any room or other compartment of a building exceeding 500 sq.m.

(iv) Departmental stores or shops that totally exceeds 750 sq.m.

(v) All nondomestic floors of mixed occupancy considered to constitute a hazard and not provided with staircases independent of the reminder of a building.

(vi) Godown and warehouses as considered necessary.

(vii) On all floors of the buildings other than apartment buildings, if the height of the building exceeds 60 m.

(viii) Dressing rooms, scenery docks, stages and stage basement of theatres.

(l) AUTOMATIC HIGH PRESSURE WATER SPRAY (MUISIFYRE)

SYSTEM: This system shall be provided for protection of indoor transformers of a substation in a basement area.

(m) FOAM GENERATING SYSTEM This system shall be provided for protection of boiler rooms with its ancillary storage of furnace oils in basement.

(n) CARBONDIOXIDE FIRE EXTINGUISHING SYSTEM Mixed CO₂ fire extinguishing installation shall be provided as per IS 6382-1971 Code of Practice for design and installation of fixed CO₂ fire extinguishing system on premises where water or foam cannot be used for fire extinguishment because of the special nature of the contents of the building areas to be protected where possible BCF (Bromochlorofluoromethane) installation may be provided instead of CO₂ installation.

(o) HOUSE KEEPING: To eliminate fire hazards a good house keeping inside the building and outside the building shall be strictly maintained by the occupants and/or the owner of the building.

(p) FIRE DRILLS AND FIRE ORDERS Fire notices/orders shall be prepared to fulfil the requirements of the fire fighting and evacuation from the buildings in the event of fire and other emergency. The occupants shall be made thoroughly conversant with their action in the event of the emergency by displaying fire notices at vantage points. Such notices should be displayed prominently in broad lettering.