# Indian Standard

# BYELAWS FOR CONSTRUCTION OF CINEMA BUILDINGS

(First Revision)

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BUREAU OF INDIAN STANDARDS MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI 110002

#### Indian Standard

#### BYELAWS FOR CONSTRUCTION OF CINEMA BUILDINGS

### (First Revision)

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#### Indian Standard

# BYELAWS FOR CONSTRUCTION OF CINEMA BUILDINGS

( First Revision )

#### 0. FOREWORD

- **0.1** This Indian Standard (First Revision) was adopted by the Indian Standards Institution on 31 December 1986, after the draft finalized by the Building Byelaws Sectional Committee, had been approved by the Civil Engineering Division Council.
- 0.2 Cinema is a very important and effective medium of communication of thought and expression, especially to the masses in the out of the way places. In India, the number of places exhibiting cinema films is quite inadequate to meet even the minimum needs of the country. Moreover, many of the existing ones do not meet some of the basic requirements of public health in respect of ventilation, listening conditions, fire safety, sanitary arrangements, lighting, exits, etc. Various State Governments have been promoting their own legislation to regulate, design, construction and operation of cinemas and also have framed rules for the day-to-day administration of the various provisions.
- 0.2.1 Existing byelaws for the construction of cinema buildings in this country differ considerably from State to State. A need has, therefore, been felt to unify them, to ensure the orderly development of new cinema buildings with regard to various requirements. With this end in view, these byelaws have been formulated to provide guidance for orderly development of new cinema buildings. Therefore this standard was first published in 1968.
- **0.3** Provisions of this standard have been made flexible to accommodate the variations for choice of materials, methods of construction requirements, etc, to cater to the various local conditions, such as different climatic conditions and availability of materials.
- 0.4 Wherever reference to building occurs in the context, it shall mean the cinema building in question.

#### **15 : 4878 - 1986**

- **0.5** This standard is intended chiefly to provide a model set of rules and regulations for the construction and maintenance of places exhibiting cinematographic films and it does not include the legal provisions regarding the grant, procedure for cinema licences, licence for sale of tickets and similar administrative details for the running of the cinema houses.
- 0.6 After the publication of the first version of Indian Standard Code in 1968, considerable comments were received from various user agencies like enforcing authorities, cinema theatre owners, practising architects and engineers as well as cinematographic equipment manufacturers for suggesting additions, modifications in certain clauses and deletion of certain provisions. Accordingly, the work on first revision of Indian Standard was undertaken. This revision contains the following major changes with respect to provisions of the Indian Standard Code of 1968:
  - a) Rationalization of definitions;
  - b) Streamlining the administrative procedures for various clearances to ensure orderly and safe development of building construction activity;
  - c) Detailed provisions on means of access have been added;
  - d) Off-street parking spaces required for cars, motor cycles, scooters and cycles have been covered for the first time depending upon the class of city designated population-wise;
  - e) Open spaces are specified in more rational fashion;
  - f) Requirements for projection room have been covered in detail;
  - g) Requirements for theatre foyer, basement, parapet, cabin, boundary wall, etc, have been included;
  - h) Exit requirements have been spelt out in a detailed and performance oriented fashion regarding the location, number and dimension and types of doors, corridors, stair-cases and ramps;
  - j) Provisions related to structural design have been related only to Indian Standard design codes and thumb rule provisions have been deleted;
  - k) The visibility requirements have been spelt out to remove certain ambiguities as well as to take into account the various projection techniques and different types of screen adopted. This is particularly relevant in the context of the distance between first row and screen;
  - m) The requirements regarding seating have been spelt out more specifically;
  - n) The requirements regarding electrical installations have been added;

- p) The requirements of fire protection have been re-written keeping in view and use of the standard by removing all the general clauses and by elaborating specific requirements;
- q) The requirements of sanitary installations have been revised to bring it in line with the Indian Standards on the subject; and
- r) The necessary provisions for semi-permanent cinema buildings have been introduced.
- 0.7 This code has been based largely on the following codes:

SP: 7-1983 National Building Code of India 1983

SP: 30-1984 National Electrical Code

0.7.1 Assistance has also been derived from the Cinema Rules of Karnataka, Tamil Nadu, Andhra Pradesh and other states.

#### 1. SCOPE

- 1.1 This code covers administrative regulations, development control rules and general building requirements; fire protection requirements; rules for design of electrical installations, lighting, air-conditioning and lifts; regulations for ventilation, acoustics visibility conditions, seating arrangements, water supply, drainage and sanitation; and regulations for maintenance of equipment, use and occupancy of places exhibiting cinematographic films.
- 1.2 The requirements of this code shall be held to be the minimum requirements in the interest of public health, comfort and safety in the construction of cinema houses.
- 1.3 The provisions of this code deal with the requirements for the construction of permanent and semi-permanent cinema buildings.

#### 2. TERMINOLOGY

- 2.0 For the purpose of this code, the following definitions shall apply.
- 2.1 Advertising Sign Any surface or structure with characters, letters or illustrations applied thereto and displayed in any manner whatsoever out of doors for purposes of advertising or to give information regarding or to attract the public to any place, person, public performance, article or merchandise whatsoever, and which surface or structure is attached to forms part of or is connected with any building, or is fixed to a tree or to the ground or to any pole, screen, fence or hoarding or displayed in space.

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- 2.2 Air-Conditioning The process of treating air so as to control simultaneously its temperature, humidity, purity and distribution to meet the requirements of conditioned space.
- 2.3 Aisles The ganways left within and around the seating area for walking into or out of a group of seats.
- 2.4 Alteration A change from one 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.
- 2.5 Approved Approved by the Authority having jurisdiction.
- 2.6 Authority Having Jurisdiction The Authority which has been created by a statute and which, for the purpose of administering, the code may authorize a committee or an official to act on its behalf, hereinafter called the 'Authority'.
- 2.7 Auditorium An enclosure, covered or open, where people can assemble for watching a performance given on the stage, or screen.
- 2.8 Balcony A horizontal projection, including a handrail or balustrade, to serve as passage or sitting out place.
- **2.9 Balcony Floor** Extra floor constructed over part of the house for seating additional audience which may or may not project beyond the rear wall.
- 2.10 Balcony Soffit The under surface of the balcony within the hall.
- 2.11 Basement or Cellar The lower storey of a building below or partly below ground level.
- **2.12 Building** Any structure for whatsoever purpose and of whatsoever materials constructed and every part thereof whether used as human habitation or not and includes foundation, plinth, walls, floors, roofs, chimneys, plumbing and building services, fixed platforms, verandah, balcony, cornice or projection, part of a building or anything affixed thereto or any wall enclosing or intended to enclose any land or space and signs and outdoor display structures. Tents, SHAMIANAHS, tarpaulin shelters, etc, erected for temporary and ceremonial occasions with the permission of the Authority shall not be considered as building.

- 2.13 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 highest point of the building adjacent to the street wall; and in the case of pitched roofs, up to the point where the external surface of the outerwall intersects the finished surface of the sloping roofs and in the case of gables facing the road, the mid-point between the eaves level and the ridge. Architectural features serving no other function except that of decoration shall be excluded for the purpose of measuring heights.
- 2.14 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.
- **2.15 Cabin** A non-residential enclosures constructed of non load bearing partition.
- **2.16 Ceiling Height** The vertical clear distance between the floor and the ceiling.
- **2.17** Chhajja A sloping or horizontal structural overhang usually provided over openings on external walls to provide protection from sun and rain.
- **2.18 Cinema** An auditorium where the performance is in the form of pictures projected on a screen through exhibition of cinematographic films.
- 2.19 Combustible Material A material, if it burns or adds heat to a fire when tested for non-combustibility in accordance with IS: 3808-1979\*.
- **2.20 Covered Area** Ground area covered by the building immediately above plinth level. The area covered by the following in the open spaces is excluded from covered area:
  - a) Garden, rockery, well and well structures, plant nursery, water pool, swimming pool (if uncovered), platform round a tree, tank, fountain, bench, chabutra with open top and unenclosed on sides by walls and the like;
  - b) drainage, culvert, conduit, catch-pit, gully pit, chamber, gutter and the like;
  - c) compound wall, gate, unstoreyed porch and portico, slide, swing, uncovered staircases, areas covered by chhajja and the like; and

<sup>\*</sup>Method of test for non-combustibility of building materials (first revision).

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- d) Watchman's booth, pump house, garbage shaft, electric cabin or sub-stations, and such other utility structures meant for the services of the building under consideration.
- Note For the purpose of these byelaws, covered area equals the plot area minus the area due for open spaces.
- 2.21 Drain A conduit or channel for the carriage of storm water, sewage or other used water.
- 2.22 Drainage The removal of any liquid by a system constructed for the purpose.
- 2.23 Echo A distinct and clearly discernible reflected sound received at a point within the enclosure when any sound emanates from any part of that enclosure. A quick succession of such echoes is called flutter or flutter echo.
- 2.24 Enclosed Staircase A staircase separated by fire resistant walls and doors from the rest of the buildings.
- **2.25 Enclosure** The portion of a place in which the cinematograhic apparatus is erected.
- 2.26 Exit A passage, channel or means of egress from any building, storey or floor area to a street or other open space of safety.
- 2.27 Fire and/or Emergency Alarm System An arrangement of points or detectors, sounders and other equipments for the transmission and indication of alarm signals, for testing of circuits and whenever required for the operation of auxiliary services. This device may be workable automatically or manually to alert the occupants in the event of fire or other emergency.
- 2.28 Fire Resisting Material A material which has certain degree of fire resistance.
- 2.28.1 Fire Resistance The time during which it fulfils its function of contributing to the fire safety of a building when subjected to prescribed conditions of heat and load or restraint. The fire resistance test of structures shall be done in accordance with IS: 3809-1979\*.
- 2.29 Floor The lower surface in a storey on which one normally walks in a building. The general term, 'floor', unless otherwise specifically mentioned shall not refer to a mezzanine floor.

Note — The sequential numbering of floor shall be determined by its relation to the determining entrance level. For floors at or wholly above ground level, the lowest floor in the building with direct entrance from the road/street shall be termed as Floor 1. The other floors above Floor 1 shall be numbered in sequence as Floor 2, Floor 3, etc, in ascending order.

<sup>\*</sup>Specification for fire resistance test of structures ( first revision ).

- 2.30 Floor Slope Floor slope is the inclination at which, the seating slopes to the horizontal. It may be positive that is sloping down towards the screen end; negative that is sloping down from the screen end towards the rear of the auditorium and compound, that is consisting partly of positive, partly of negative and may have a portion level in between.
- 2.31 Foyer Hall in front of the entrance in which the audience may wait before actually entering the auditorium.
- 2.32 Gallery An intermediate floor or platform projecting from a wall of an auditorium or a hall providing extra floor area, additional seating accommodation, etc.
- 2.33 Head Room The vertical distance between the floor and the ceiling. Where a finished ceiling is not provided, the under side of the joints or beams or tie beams shall determine the upper point of measurement.
- 2.34 Licensed Architect/Engineer A qualified architect/engineer who has been licensed by the Authority.
- 2.35 Lobby Passage or small ante-room, into which one or more rooms open.
- 2.36 Lounge Sitting room or place for relaxation.
- 2.37 Non-combustible Material A material which neither burns not gives off inflammable vapours in sufficient quantity to ignite a pilot flame ( see 2.19 ).
- 2.38 Non-inflammable Materials Materials in which charring or scorching does not reach the edge of the face of a 152.4 mm unperforated square sheet or to 76.2 mm from the point of application of the spirit flame when a large sheet is tested and which, when a perforated sheet is tested, does not continue to glow or carry flame after the spirit test flame has burnt out.
- 2.39 Open Space —An area, forming an integral part of the plot, left open to the sky.
- 2.39.1 Front Open Space An open space extending across the front of a plot between the side open space lines and being the minimum horizontal distance between the street line and the main building or any projection thereof other than steps. Unenclosed balconies and unenclosed porches.
- 2.39.2 Rear Open Space An open space extending across the rear of a plot measured between plot boundaries and being the minimum horizontal distance between the rear plot boundary and the rear of the building or any projections other than steps, unenclosed balconies or unenclosed porches.

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- 2.39.3 Side Open Space An open space between the building and the side line of the plot and extending from the front line to the rear line of the plot and being the minimum horizontal distance between a side boundary line and the sides of the building or any other projections other than steps, unenclosed balconies or unenclosed porches.
- **2.40 Owner** The word, when used in reference to any premises, means the person who receives the rent of the said premises or would be entitled to do so if the premises were let out. It also includes the following:
  - a) An agent of trustee who receives such rent on behalf of the owner;
  - b) A receiver, executor or administrator or a manager appointed by any court of competent jurisdiction to have the charge of, or exercise the rights of, an owner of the said premises;
  - c) An agent or trustee who receives the rent of or is entrusted with or is concerned with any premises devoted to religious or charitable purposes;
  - d) A mortgage in possession; and
  - e) Occupier or licensee, who according to the terms of lease, is empowered to act on behalf of the owner.
- 2.41 Parapet A low wall or railing built along the edge of a roof or a floor.
- 2.42 Parking Space An area enclosed or unenclosed sufficient in size to park vehicles together with a drive way connecting the parking spaces with a street or public place and permitting easy ingress and egress of the vehicle.
- 2.43 Plinth The portion of a structure between the surface of the surrounding ground and surface of the floor, immediately above the ground.
- **2.44 Porch** A covered surface supported on pillars or otherwise for the purpose of pedestrian or vehicular approach to a building.
- 2.45 Road or Street Any means of access, namely, highway, street lane, pathway, alley, stairway, passageway, carriageway, footway, square, place or bridge, whether a thoroughfare or not, over which the public have a right of passage or access or have passed and had access uninterruptedly for a specified period, whether existing or proposed in any scheme, and includes all bunds, channels, ditches, storm water drains, culverts, sidewalks, traffic islands, roadside trees and hedges, retaining walls, fences, barriers and railing within the road lines.

- 2.46 Road/Street Line The line defining the side limits of a road.
- **2.47 Sanctioned Plan** The set of plans and specification submitted under the code in connection with a building and duly approved and sanctioned by the Authority.
- 2.48 Semi-Permanent Cinema Building A building which is constructed of non-inflammable materials, as is generally used for the construction with side walls of 1 0 m high plastered over which durable black canvas, tarpaulin curtains or other suitable materials shall be provided so as to shut off light and afford shelter from rain.
- 2.49 Site (Plot) A parcel (piece) of land enclosed by definite boundaries.
- **2.50 Storey** The portion of a building included between the surface of any floor and the surface of the floor next above it or if there be no floor above it then the space between any floor and the ceiling next above it.
- 2.51 Street Level or Grade The officially established elevation 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 midpoint.
- 2.52 To Erect To erect a building means:
  - a) To erect a 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, burnt or destroyed; and
  - c) Conversion from one occupancy to another.
- 2.53 Travel Distance The distance from the remotest point on a floor of a building to a place of safety be it a vertical exit, horizontal exit or an outside exit measured along the line of travel.
- 2.54 Ventilation Supply of outside air into or the removal of inside air from an enclosed space.
- 2.55 Water Closet (WC) A privy with arrangement for flushing the pan with water. It does not include a bathroom.
- 2.56 Zoning Regulations Any regulation or plan govering land use approved by the Authority.

#### 3. ADMINISTRATION

#### 3.1 Applicability of the Code

- 3.1.1 Where a building is erected, the Code applies to the design and construction of the building.
- 3.1.2 Where the whole or any part of the building is removed, the Code applies to all parts of the building whether removed or not.
- 3.1.3 Where the whole or any part of the building is demolished, the Code applies to any remaining part and to the work involved in demolition.
- 3.1.4 Where a building is altered, the Code applies to the whole building whether existing or new except that the Code applies only to part if that part is completely self contained with respect to facilities and safety measures required by the Code.

Note — In the case of existing cinema buildings, the Code shall not apply to the whole of cinema building for alterations if the alterations result in increase in conveniences, safety, etc, without increase in seating capacity.

3.1.5 Existing Buildings — Nothing in the Code shall require the removal, alteration or abandonment, nor prevent continuance of the use or occupancy of an existing building, unless in the opinion of the Authority, such building constitutes a hazard to the safety of the adjacent property or the occupants of the building itself.

#### 3.2 Interpretation

- 3.2.1 The heading which appears at the beginning of a clause or subclause of the Code shall be deemed to be a part of such clause or subclause respectively.
- 3.2.2 The use of present tense includes the future tense, the masculine gender includes the feminine and the neuter, the singular number includes the plural and the plural includes the singular. The word 'person' includes a corporation as well as an individual; writing includes printing and typing and 'signature' includes thumb impression made by a person who cannot write if his name is written near to such thumb impression.

## 3.3 Alternative Materials, Methods of Design and Construction and Tests

3.3.1 The provision of the Code are not intended to prevent the use of any material or method of design or construction not specifically prescribed by the Code, provided any such alternative has been approved.

- 3.3.2 The Authority may approve any such alternative provided it is found that the proposed alternative is satisfactory and conforms to the provisions of relevant parts regarding material, design and construction and that material, method, or work offered is, for the purpose intended at least equivalent to that prescribed in the Code in quality, strength compatibility, effectiveness, fire and water resistance, durability and safety.
- 3.3.3 Tests Whenever there is insufficient evidence of compliance with the provisions of the Code or evidence that any material or method of design or construction does not conform to the requirements of the Code or in order to substitute claims for alternative materials, design or methods of construction the Authority may require tests sufficient in advance as proof of compliance. These tests shall be made by an approved agency at the expense of the owner.
- 3.3.3.1 Test methods shall be as specified by the code for the materials or design or construction in question. If there are no appropriate test methods specified in the code, the Authority shall determine the test procedure. For methods of test for building materials, reference may be made to relevant Indian Standards.
- 3.3.3.2 Copies of the results of all such tests shall be retained by the Authority for a period of not less than two years after the acceptance of the alternative material.

#### 3.4 Enforcement

- 3.4.1 The provisions of this code shall be enforced by the Authority or by a committee or an official or officials duly appointed by the Authority for such purpose.
- 3.4.2 Records The Authority shall keep proper records of all applications received, permits and orders issued, inspections made and shall retain copies of all papers and documents connected with the administration of its duties.
- 3.4.3 Inspection The Authority may, at any resonable time, enter into or building or premises for the purpose of ascertaining whether or not the provisions of this Code are being complied with.
- 3.4.4 Construction not According to Plan Should the Authority determine at any stage that the construction is not proceeding according to the sanctioned plan or is in violation of any of the provisions of these byelaws, or any other applicable code, regulation, act or byelaw, it shall notify the owner, and all further construction shall be stayed until correction has been effected and approved.

- 3.4.4.1 Should the owner fail to comply with the requirements at any stage of construction, the Authority is empowered to cancel the building permit issued and shall cause notice of such cancellation to be securely posted upon the said construction, if the owner is not traceable at his address given in the notice. Posting of such a notice shall be considered sufficient notification of cancellation to the owner thereof. No further work shall be undertaken or permitted upon such construction until a valid building permit thereafter has been issued. If the owner, in violation of the notice for cancellation, continues the construction the Authority may take all necessary means to stop such work.
- **3.4.5** Offences and Penalties Any person who contravenes any of the provisions of the Code of any requirements of obligations imposed on him by virtue of the Code, or who interferes with or obstructs any person in the discharge of his duties, shall be guilty of an offence and the authority shall levy suitable penalty.
- 3.4.5.1 The licensed architect/engineer shall be responsible of the construction and for the completion certificate; in the event of violation of the provisions of the Code he shall be liable to penalties as prescribed by the Authority including cancellation of licence.
- 3.4.6 Power to Make Rules The Authority may make rules for carrying out the provisions and intentions of this Code provided that rules shall not be in direct conflict or nullify any of the provisions of this Code.

#### 3.5 Cinema Building Permit/Licence

- 3.5.1 New Cinema Buildings No cinema building or any part of cinema building shall hereafter be erected except in conformity with provisions of this Code and a cinema building permit/licence is obtained from the licensing Authority/local body Authority.
- 3.5.2 Precode Building Permit If any building, permit for which has been issued before the commencement of this Code is not wholly completed within a period of three years or within such extended period as may be allowed by the Authority from the date of such permit, the said permission shall be deemed to have lapsed and fresh permit shall be necessary to proceed further with the work in accordance with the provisions of this Code.

#### 3.6 No Objection Certificate

**3.6.1** Application for No Objection Certificate — In areas where positive planning for cinema sites is available, no objection certificate is not necessary. In the case of area where positive planning is not available, no objection certificate shall be obtained in accordance with the following regulations:

- a) No person under 18 years of age shall be entitled to obtain or hold any licence under these rules.
- b) Any person desirous of erecting a cinema building or converting existing permises into a cinema shall first make public his intention to do so by exhibiting a notice given in Appendix A on a board on the proposed site in such a position that it may be plainly seen from the public thoroughfare upon which the site of such proposed cinema abuts. The notice shall be in the language of the locality or the language approved by the Authority. The notice on the board shall be maintained on the site until the matter is decided by the licensing Authority.

The board shall be at least  $1.20 \times 0.90$  m in size and the notice shall be exhibited thereon in bold and clearly legible letters.

- c) Such person shall also give a similar notice in writing to the licensing Authority and make an application to the licensing Authority for grant of a 'No Objection Certificate' specifying therein whether the application is in respect of a permanent cinema or a semi-permanent cinema. The application shall be accompanied by a plan of the proposed site drawn to scale and shall clearly indicate the surroundings, roads and buildings which exist up to a distance of 60 m of the proposed site. Schools, hospitals, temples or other like places should be clearly indicated in the plan ( see also 4.1.2 ).
- 3.6.2 On receipt of such notice, the competent Authority shall at the cost of the applicant, notify the public or such intention by publication in newspapers or otherwise as it may be deem fit for the purpose of inviting objections. A notification as shown in Appendix B for inviting objections shall be issued by the licensing Authority and shall specify the period within which the objections shall be lodged with it.
- **3.6.3** The application for grant of a 'No Objection Certificate' shall be decided by the Authority within 90 days of the receipt of the application.
- 3.6.3.1 If within 90 days of the receipt of application for 'No Objection Certificate', the Authority fails to intimate in writing to the applicant, of its refusal or sanction, the no objection certificate shall be deemed to have been sanctioned. In case of refusal, the Authority shall quote the reasons within stipulated time.
- 3.6.4 The 'No Objection Certificate' shall be in the form of Appendix C and shall be valid for a period of 10 years on the date of issue in case of permanent cinemas and 5 years in case of semi-permanent cinemas.

#### 3.7 Application for Cinema Building Permit/Licence

- 3.7.1 Notice After the grant of 'No Objection Certificate' every person who intends to erect or make material alteration in any place in a cinema building shall give notice in writing to the Authority of his said intention in the form prescribed (see Appendix D) from time to time and such notice shall be accompanied by plans and statements in quadruplicate, as required under 3.7.2 and 3.7.3. The plans may be ordinary prints on ferro paper. One set of such plans should be cloth mounted and shall be retained in the office of the Authority for record after the issue or refusal of a permit.
- 3.7.2 Information The notice shall be accompanied by the site plan, building plan, services plans, specifications and certificate of supervision as prescribed in 3.7.2.2 to 3.7.2.6.
- 3.7.2.1 Size of drawing sheets and recommended notation for colouring plans
  - a) The size of drawing sheets shall be any of those specified in Table 1.
  - b) The plans shall be coloured as specified in Table 2.

TARLE	1	DR	WING	SHEET	SIZES

St No.	DESIGNATION	TRIMMED SIZE IN mm	Untrimmed Size in mm
(1)	(2)	(3)	(4)
i)	<b>A</b> 0	$841 \times 1189$	$880 \times 1230$
ii)	· A1	$594 \times 841$	$625 \times 880$
iii)	<b>A</b> 2	$420 \times 594$	$450 \times 625$
iv)	A3	$297\times420$	$330 \times 450$
. <b>v</b> )	A4	$210 \times 297$	$240 \times 330$
vi)	<b>A</b> 5	$148\times210$	$165 \times 240$

- 3.7.2.2 Site plan The site plans sent with an application for permit shall be drawn to scale of not smaller than 1:500 and shall show:
  - a) the boundaries of the site and of any contiguous land belonging to the owner thereof;
  - b) the position of the site in relation to neighbouring street;
  - c) the name of the street on which the building is proposed to be situated, if any;

#### TABLE 2 COLOURING OF PLANS

[ Clause 3.7.2.1 (b) ]

St No. ITEM			SITE PLAN		Building Plan		
		White Plan	Blue Print	Ammonia Print	White Plan	Blue Print	Ammonia Print
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
i)	Plot lines	Thick black	Thick black	Thick black	Thick black	Thick black	Thick black
ii)	Existing street	Green	Green	Green	_	_	
iii)	Future street if any	Green dotted	Green dotted	Green dotted	-		
iv)	Permissible building lines	Thick dotted black	Thick dotted black	Thick dotted black			
(v)	Open spaces	No colour	No colour	No colour	No colour	No colour	No colour
vi)	Existing work	Black (outline)	White	Blue	Black	White	Blue
vii)	Work propo- sed to be demolished	Yellow hatched	Yellow hatched	Yellow hatched	Yellow hatched	Yellow hatched	Yellow hatched
viii)	Proposed work ( see Note )	Red filled in	Red	Red	Red	Red	Red
ix)	Drainage and sewerage work	Red dotted	Red dotted	Red dotted	Red dotted	Red dotted	Red dotted
<b>x</b> )	Water supply work	Black dotted thin	Black dotted thin	Black dotted thin	Black dotted thin	Black dotted thin	Black dotted thin

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

- d) all existing buildings standing on, over or under the site;
- e) the position of the building, and of all other buildings, if any, which the applicant intends to erect upon his contiguous land referred to in (a) relation to:
  - 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 the other owners;
  - ii) all adjacent streets, buildings (with number of storeys and height) and premises within a distance of 12 m of the site and of the contiguous land (if any) referred to in (a); and
  - iii) if there is no street within a distance of 12 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 a 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 or rear of the buildings;
- j) the direction of north point relative to the plan of the buildings;
- k) any existing physical features, such as wells, drains, etc; and
- m) such other particulars as may be prescribed by the Authority.
- 3.7.2.3 Building plan The plans of the buildings and elevations and sections accompanying the notice shall be drawn to a scale of 1:100. The plans shall:
  - 1) include floor plans of all floors together with the covered area clearly indicating the size and spacings of all framing members and sizes of rooms and the position of staircases, corridors, gangways, ramps with its slope and other exit ways, lift wells, lift machine room and lift pit details;
  - 2) include detailed plan of auditorium and balcony with its slope showing seating arrangements (the width of seats, back to back distance of seats, intervening distance between row of seats), distance from the screen to the first row of seats, details of longitudinal and cross aisles, etc;
  - 3) show the use or occupancy of all parts of the buildings;

- 4) show exact location of essential services, for example, arrangment of drinking water, WC, sink, bath and the like;
- 5) show details of booking windows and booths;
- 6) include sectional drawings showing clearly the size of footings, thickness of basement wall, wall construction, size and spacing of framing members, floor slabs and roof slabs with their materials. The section shall indicate the heights of building and rooms and also the height of the parapet; and the drainage and the slope of the roof. At least one section should be taken through the staircase;
- 7) include details of building services, such as, air-conditioning system with position of dampers, mechanical ventilation system, electrical services, etc;
- 8) show location and details of electric sub-station;
- 9) show location and details of lift enclosures and fire lifts;
- 10) show location of smoke stop lobby/door, where provided;
- 11) show location of refuse chutes, refuse chamber, service ducts, etc; and refuse area, if any;
- 12) show projector from with the location and details of cinematograph equipment, plant for the generation and conversion of electrical energy, transformer and switchgear room;
- 13) show smoke exhauster system;
- 14) include details of fire alarm system net work;
- 15) show location of centralised control, connection of all fire alarm system, built-in fire protection arrangements and public address system, etc;
- show location and dimensions of static water storage tank and pump room;
- 17) show location and details of fixed fire protection installation, such as, sprinklers, wet risers, hosereels drenches, CO<sub>2</sub> installations, etc;
- show location and details of first-aid fire fighting equipments/ installations;
- give access to fire appliances/vehicles with details of vehicular turning circle and clear motorable accessway around the building;
- 20) give size (width) of main and alternate staircases along with balcony approach, corridor, ramp, ventilated lobby approach;

- 21) give dimensions of the projected portions beyond the permissible building line;
- show details of vehicular parking spaces provided for cars, scooters, motor cycles and cycles;
- 23) include terrace place indicating the drainage and the slope of the roof;
- 24) show all street elevations;
- 25) give indications of the north point relative to the plan; and
- 26) such other particulars as may be prescribed by the Authority.
- 3.7.2.4 Services plans The services plans shall include all details of building services such as mechanical ventilation system, air-conditioning system, electrical services and lifts, and also details of plumbing services including plans, elevations and sections of private water supply and sewage disposals system, if any.
- 3.7.2.5 Specifications Specifications, both general and detailed, giving type and grade of materials to be used, duly signed by the licensed architect/engineer shall accompany the notice ( see Appendix D ).
- 3.7.2.6 Supervision The notice shall be further accompanied by a certificate in the prescribed form (see Appendix E) by the licensed/architect engineer (see Appendix F) undertaking the supervision (see 3.4.5.1).
- 3.7.3 Preparation and Signing of Plans The licensed architect/engineer shall prepare and duly sign all plans and shall indicate his name, address, qualification and licence number as allotted by the Authority. The plans shall also be duly signed by the owner indicating his address. The services (building and plumbing services) plans shall also be prepared and signed by competent persons having suitable qualifications.
- 3.7.4 Notice for Alteration Only When the notice is only for an alteration in the building (see 3.1.4.), only such plans and statements, as may be necessary, shall accompany the notice.
- 3.7.4.1 No notice and building permit is necessary for the alterations such as opening and closing of a window or door or ventilator providing inter-communication doors, providing partitions, providing false ceiling, re-roofing, re-flooring, re-erection of portions of buildings damaged by earthquake or other natural calamities to the same extent and specification as existed prior to such damage; and the like which do not otherwise violate any provisions regarding general building requirements, structural stability and fire safety requirement of the Code.

- 3.7.5 Notice for Land Adjoining the Government or Corporate Bodies Formed Under the Statute In case of a notice of intention to erect, re-erect or make alteration in a building or to make or enlarge any structure abutting on property maintained by Public Works Department, Desence or other Government Departments, the notice and plan shall be in sufficient numbers to enable the Authority to forward one set each to the appropriate departments for report before the permission is granted; the government department shall report to the Authority within two weeks from the date of the receipt of the notice and plans whether or not they have any objection to the proposed construction. If no reply is received within two weeks by the Authority, from the Government Department the notice and plans shall be deemed to have been sanctioned.
- 3.7.6 Fees No notice as referred to in 3.7.1 shall be deemed valid unless and until the person giving notice has paid the fees to the Authority and an attested copy of the receipt of such payment is attached with the notice.
  - NOTE The fees may be charged in terms of total floor area of the building. In the event of a building permit is not issued, the fees so paid shall not be returned to the owner, but he shall be allowed to re-submit it without any fees after complying with all the objections raised by the Authority within a period of one year from the date of rejection after which fresh fees shall have to be paid.
- 3.7.7 Duration of Sanction The sanction once accorded shall remain valid up to three years and if the work is not completed, the permit shall be got revalidated before the expiration of this period. Revalidation shall be subject to the rules then in force.
- 3.7.8 Deviations During Construction If during the construction of building any departure (excepting for items as given in 3.7.4.1 from the sanctioned plan is intended to be made (see 3.4.4), sanction of the Authority shall be obtained before the change is made. The revised plan showing the deviations shall be submitted and the procedure laid down for the original plan heretofore shall apply to all such amended plans except that the time limit specified under shall be three weeks in such cases.
- 3.7.9 Revocation of Permit The Authority may revoke any permit issued under the provisions of the Code, wherever there has been any false statement or any misrepresentation of any material fact in the application on which the permit was based.
- 3.7.10 Qualification of the Architects | Engineers Architects and engineers referred to under 3.7.2.4, 3.7.2.5 and 3.7.3 shall be licensed by the Authority as competent to do the work for which they are employed. A guide for the equivalent technical qualifications required for such licensing with the Authority is given in Appendix F.

- 3.7.11 Grant of Permit or Refusal The Authority may either sanction or refuse the plans and statements or may sanction them with such modifications or directions as it may deem necessary and thereupon shall communicate its decision to the person giving the notice (see Appendix G).
- 3.7.11.1 The building plans shall also be subject to the scrutiny of the Fire Authority and the sanction through building permit shall be given by the Authority after the clearance from the Fire Authority.
- 3.7.11.2 If within 30 days of the receipt of the notice under 3.7.1 of the Code, the Authority fails to intimate in writing to the person, who has given the notice, of its refusal or sanction, the notice with its plan and statements shall be deemed to have been sanctioned; provided the fact is immediately brought to the notice of the Authority in writing by person who has given notice and having not received any intimation from the Authority within fifteen days of giving such written notice. Subject to the conditions mentioned in this clause, nothing shall be construed to authorise any person to do anything in contravention of or against the terms of lease or titles of the land or against any other regulations, byelaws or ordinance operating on the site of the work.
- 3.7.11.3 In case of refusal, the Authority shall quote the reason and relevant sections of the Code which the plans contravene. The Authority shall as far as possible advise all the objections to the plans and specifications in the first instance itself and ensure that no new objections are raised when they are re-submitted after compliance of earlier objections.
- 3.7.11.4 Once the plan has been scrutinized and objections have been pointed out, the owner giving notice 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 be further objections, the plan shall not be rejected.

#### 3.8 Responsibilities and Duties of the Owner

3.8.1 Neither the granting of the permit nor the approval of the drawings 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 the Code ( see 3.4.5).

#### 3.8.2 Every owner shall:

- a) permit the Authority to enter the building or premises for which the permit has been granted, at any reasonable time for the purpose of enforcing the Code.
- b) submit a document of ownership of the site;

- c) obtain, where applicable, from the Authority, permits relating to building, grades, sewers, watermains, plumbing, signs, blasting, street occupancy, electricity, highways, and all other permits required in connection with the proposed work;
- d) give notice to the Authority of the intention to start work on the building site ( see Appendix H );
- e) give written notice to the Authority regarding completion of work described in the permit ( see Appendix J ); and
- f) obtain an occupancy permit (see Appendix K) from the Authority.

#### 3.8.3 Documents at Site

- 3.8.3.1 Where tests of any materials are made to ensure conformity with the requirements of the Code, records of the test data shall be kept available for inspection during the construction of the building and for such a period thereafter as required by the Authority.
- 3.8.3.2 The person to whom a permit is issued shall during construction keep:
  - a) posted in a conspicuous place on the property in respect of which the permit was issued, a copy of the building permit; and
  - b) a copy of the approved drawings and specifications referred to in 3.7 on the property in respect of which the permit was issued.

#### 3.9 INSPECTION

- 3.9.1 Generally all construction or work for which a permit is required shall be subject to inspection by the Authority and certain types of construction involving unsual hazards or requiring constant inspection shall have continuous inspection by special inspectors appointed by the Authority.
- 3.9.2 Inspection, where required, shall be made within 7 days following the receipt of notification, after which period the owner will be free to continue the construction according to the sanctioned plan. At the first inspection, the Authority shall determine to the best of its ability that the building has been located in accordance with the approved site plans. The final inspection of the completion of the work shall be made within 21 days following the receipt of notification [ see 3.8.2 (e) ] for the grant of occupancy certificate.
- 3.9.3 When inspection of any construction operation reveals that any lack of safety precautions exist, the Authority shall have right to direct the owner to stop the work immediately until the necessary remedial measures to remove the violation of safety precautions are taken.

3.9.4 Periodic inspections of building after completion shall be made by the Fire Authority to ensure compliance with the provisions of fire protection requirements.

#### PART 1 PERMANENT CINEMA BUILDINGS

#### 4. MEANS OF ACCESS

- 4.1 Every person who erects a building shall not at any time erect or cause or permit to erect any building which in any way encroaches upon or diminishes the area set apart as means of access. No building shall be erected so as to deprive any other building of the means of access.
  - 4.1.1 The means of access shall not be less than the following:

Vidth of Means	Length of Means
of Access	of Access
$\mathbf{m}$	$\mathbf{m}$
12.0	200
15.0	400
18.0	600
<b>24</b> ·0	Above 600

Further, in no case shall the means of access be lesser in width than the internal accessways.

- 4.1.2 The width of the main street on which the building abuts shall not be less than 12 m as given under 4.1.1 and one end of this street shall join another street not less than 12 m in width.
  - 4.1.3 The street shall not end in a dead end.
- 4.1.4 The approach to the building and open spaces on all its sides up to 6 m width and the layout for the same shall be done in consultation with the Fire Authority of the city and same shall be hard surface capable of taking the weight of fire engine, weighing up to 18 tonnes. The said open space shall be kept free of obstructions and shall be motorable.
- 4.1.5 The main entrance to the plot shall be adequate width to allow easy access to the fire engine and in no case shall it measure less than 4.5 m. The entrance gate shall fold back against the compound wall of the premises, thus leaving the exterior accessway within the plot free for movement of fire service vehicle. If the main entrance at the boundary wall is built over, the minimum clearance shall be 4.5 m. If an arch or covered gate is constructed, it shall have a clear head-room of not less than 5 m.

- 4.1.6 The building site shall in no way offend against traffic laws.
- 4.1.7 The means of access shall be levelled, metalled, flagged, paved, sewered, drained, channelled, lighted, laid with water supply line and provided with trees for shade to the satisfaction of the Authority free of encroachment by any structure of fixture so as not to reduce its width below the minimum required under 4.1.1 and shall be maintained in a condition to the satisfaction of the Authority.

#### 5. SITE REQUIREMENTS

#### 5.1 Locality of Site and Particulars

- 5.1.1 No building shall be constructed on any site, or any part of which there is deposited refuse, excreta or other offensive matter objectionable to the Authority, until such refuse has been removed therefrom and the site has been prepared or left in a manner suitable for building purposes to the satisfaction of the Authority.
- 5.1.2 No site which would admit of storm water draining into it owing to its level or location shall be used for the construction of the building unless arrangements are made to prevent effectively the flooding of the site, either by draining into a storm water-course, if one is available or by raising the level of the site to an adequate height by the deposit of layers of sound and non-putrescible material.
- 5.1.3 No site wherein the soil and sub-soil would be so saturated with water that dampness of the floor and walls of the building would be inevitable, shall be used for the construction of the building unless a dampproof course is provided in the basement of the building not higher than the level of the lowest floor unless the flooring is made with a material approved by the Authority, which would effectively prevent the dampness rising in the floor of the building.
- 5.1.4 Every person who constructs, reconstructs, alters or adds to a building shall wherever the site is within 15 m of any tank, reservoir, water-course, river, fresh water channel or well carry out such measures as may be necessary or as the Authority may direct for the purpose of preventing any contamination of or any risk of the drainage of building passing into such tank, reservoir, water-course, river, fresh water channel or well.

**5.1.5** Distance from Electric Lines — No building shall be allowed to be erected or re-erected, or any additions or alterations made to the existing building, unless, the following minimum clearances in accordance with the current Indian Electricity Rules are provided from the overhead electric supply lines:

		Vertical m	$egin{aligned} Horizontal \ \mathbf{m} \end{aligned}$
Low and medium voltage lines		2.5	1.2
	Up to and including 11 000 V	3.7	1.2
High voltage }	Above 11 kV up to and including 33 kV	3.7	2.0
Extra high voltage lines		3·7 ( See Note )	2·0 ( See Note )

Note — For extra high voltage lines apart from the minimum clearances indicated, a vertical and horizontal clearance of 0.30 m for every additional 33 kV or part thereof shall be provided.

5.1.6 The location of a cinema site shall be governed by the provisions of the development plan and/or development control rules, if any and for areas having no development plans, the site shall have to be approved by the Authority after giving due regard to the environment and involvements of the site, giving due cognizance to safety and hygiene.

# 5.2 Criteria of Number of Cinema Houses and Its Location in a Single Plot

- **5.2.1** Ginema house may be constructed underneath the other permitted occupancy in the same building but not in the basement. It shall not be permitted to be constructed on the top of other occupancy.
- 5.2.2 Another cinema house of smaller capacity with a proper designing on the top of cinema house at ground floor or more than one cinema house in a single plot may be permitted to be constructed provided requirements in regard to traffic load, parking, fire fighting, water supply, drainage and other safety requirements are ensured. In such cases working hours or show hours may be staggered to avoid a large gathering on the site.
- 5.3 Frontage The minimum width of the frontage shall be 30 m.

#### 6. OPEN SPACES

**6.1 Front Side and Rear Open Spaces** — The open space at front shall be not less than 12 m and other open spaces around the building shall be not less than 6 m. The front open space for increasing heights of buildings shall also be governed by **7.2**(a).

Note — However, if cinema houses are permitted in pure residential zones, the open spaces around the building shall be not less than 12 m.

- **6.2 Projections into Open Spaces** Every open space provided shall be kept free from any erection thereon and shall be open to sky except as below:
  - a) Cornice, roof or weather shade not more than 0.75 m wide;
  - b) Sunshades over windows/ventilators or other openings not more than 0.75 m wide;
  - c) Projected balcony at higher floors of width not more than 0.9 m; and
  - d) Porch of width not more than 3.6 m.

#### 6.3 Limitations to Open Spaces

- **6.3.1** Safeguard Against Reduction of Open Space No construction work on a building shall be allowed if such work operates to reduce an open space of any other adjoining building belonging to the same owner to an extent less than what is prescribed at the time of the proposed work or to reduce further such open space if it is already less than that prescribed.
- **6.3.2** Additions or Extensions to a Building Additions or extensions to a building shall be allowed, provided the open spaces for the additions/extensions satisfy provisions of **6.1** after such additions/extensions are made and building regulations.

#### 7. AREA AND HEIGHT LIMITATIONS

- 7.1 The limitation of area and height of buildings shall be governed by the provisions of floor area ratio (FAR) given in the development plan and/or development control rules, if any and for areas having no development plan, the FAR shall be specified by the Authority taking into account the various aspects as given below:
  - a) Types of construction;
  - b) Width of street fronting the building and the traffic load;
  - c) Locality where the building is proposed and the density;
  - d) Parking facilities;
  - e) Local fire fighting facilities; and
  - f) Water supply and drainage facilities.

- 7.2 Height Limitations The height and number of storeys shall be governed by the limitations of FAR, open spaces (see 5) and the width of the street fronting the plot in accordance with the following:
  - a) The maximum height of building shall not exceed 1.5 times the width of street abutting plus the front open space;
  - b) If a building abut 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 that street and may be continued to this height to a depth of 24 m along the narrower street subject to conformity of 5; and
  - c) For buildings in the vicinity of aerodromes, the maximum height of such buildings shall be decided in consultation with the Civil Aviation Authorities.

#### 8. OFF-STREET PARKING SPACES

8.1 The off-street parking (on-site parking) spaces in a plot to be provided shall be in accordance with Appendix L. The spaces given in Appendix L shall be considered by the Authority in conjunction with the Development Control Rules, in force, if any.

#### 9. REQUIREMENTS OF PARTS OF BUILDINGS

9.1 Plinth — The plinth or any part of a building or outhouse shall be so located with respect to the surrounding ground level that adequate drainage of the site is assured. The height of the plinth shall be not less than 45 cm from the surrounding ground level.

#### 9.2 Tiers, Galleries and Balconies

- 9.2.1 Where the first tier, gallery or balcony extends over any part of the auditorium, the height between the floor of the auditorium and the soffit of such tier, gallery or balcony shall not, in any part be less than 3 m.
- 9.2.2 The height between floor of the highest part of the seating on the tier, gallery or balcony and the lowest part of the roof ceiling over the same shall not in any part be less than 3 m.
- 9.2.3 The height between the soffit of any tier, gallery or balcony and the floor of another tier, gallery or balcony below it, shall in no case be less than 2.4 m.

#### 9.3 Water-Closet

9.3.1 The height of a water-closet measured from the surface of the floor to the lowest point in the ceiling (bottom) shall not be less than 2 m.

**9.3.2** The floor area of water-closet shall be  $1.1 \text{ m}^2$  with a minimum width of 0.9 m.

#### 9.3.3 Every water-closet shall:

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

#### 9.4 Projection Room

- 9.4.1 The projection room having one equipment shall have minimum floor area of 18 m², with a minimum width of 3.3 m. The maximum floor area of projection room shall be 33.5 m² for commercial cinema buildings. This shall include the space for rewinding bench, inspection panel, amplifier, power package, etc.
- 9.4.2 The height of the projection room measured from the surface of the floor to the lowest point in ceiling (bottom of slab) shall not be less than 3 m.
- 9.4.3 In case separate space/room is provided for amplifier, tape deck and film safe, minimum floor area of 6 m<sup>2</sup> shall be provided. Switch room shall have minimum floor area of 6 m<sup>2</sup>.
- 9.4.4 The number and sizes of openings in the front face of the enclosure shall be provided in accordance with the type of projection such as 35 mm, 70 mm, cinemascope and cinerama, wide angle, and vistavision as well as based on the number of machines being used for projector.

#### 9.5 Theatre Foyers

9.5.1 In every cinema building, a foyer or lobby shall be provided with a net floor area, exclusive of stairs or landings, of not less 0.15 m<sup>2</sup> for each

occupant having access thereto. The use of foyers and lobbies and other available spaces for harbouring occupant until seats become available shall not encroach upon the clear floor area herein prescribed or upon the required clear width of front exitways.

#### 9.6 Basements

- 9.6.1 The construction of the basement shall be allowed by the Authority in accordance with the land use and other provisions specified under the Development Control Rules.
- 9.6.1.1 The basement to be constructed within the prescribed set-backs and prescribed building lines and subject to maximum coverage on floor 1 (entrance floor) may be put to only the following uses:
  - a) Air-conditioning equipment and other machines used for services and utilities of the building; and
  - b) Parking spaces.
- 9.6.2 Every basement shall be in every part at least 2.4 m in height from the floor to the underside of the roof slab or ceiling.
- 9.6.3 The minimum height of the ceiling of any basement shall be 0.9 m and the maximum, 1.2 m above the average surrounding ground level.
- 9.6.4 The walls and floors of the basement shall be watertight and be so designed that the effects of the surrounding soil and moisture, if any, are taken into account in design and adequate damp-proofing treatment is given.

#### 9.7 Cabin

9.7.1 The size of cabins shall not be less than 3.0 m<sup>2</sup>. The clear passages within the divided space of any floor shall not be less than 0.75 m and the distance from the farthest space in a cabin to any exit shall not be more than 18.5 m. The maximum height of the cabin shall be 2.2 m.

#### 9.8 Parapet

9.8.1 Parapet walls and handrails provided on the edges of roof terraces, balcony, verandah, etc, shall not be less than 1.05 m and not more than 1.20 m in height from the finished floor level.

#### 9.9 Boundary Wall

9.9.1 Except with the special permission of the Authority, the maximum height of the compound wall shall be 2.4 m above the centre line of the front street.

9.9.2 In case of a corner plot, the height of the boundary wall shall be restricted to 0.9 m for a length of 10 m on the front and side of inter-sections and balance height of 15 m if required may be made of open type construction through railings or of a design as approved by the Authority.

#### 9.10 Staircase

- 9.10.1 The minimum width of staircase shall be 1.5 m. The minimum width of tread without nosing shall be 30 cm. The maximum height of riser shall be 15 cm and risers shall be limited to 15 per flight.
- 9.10.2 The minimum head-room in a passage under the landing of a staircase shall be 2.2 m. The minimum clear head-room in any staircase shall be 2.2 m.

#### 10. EXIT REQUIREMENTS

#### 10.1 Types of Exits

- 10.1.1 An exit may be a doorway; corridor; passageway(s) to an internal staircase, or external staircase, or to a verandah or terrace(s), which have access to the street, or to the roof of a building or a refuge area. An exit may also include a horizontal exit leading to an adjoining building at the same level.
  - 10.1.2 Lifts and escalators shall not be considered as exits.

#### 10.2 General

- 10.2.1 Every place of assembly, every tier or balcony, and every individual room used as a place of assembly shall have exits sufficient to permit safe escape of occupants, in case of fire or other emergency.
- 10.2.2 In every building, exits shall comply with the minimum requirements of this part, except those not accessible for general public use.
- 10.2.3 All exits shall be free of obstructions. No display or exhibit shall be so installed or operated as to interfere in any way with access to any required exit, or with any required exit sign.
- 10.2.4 No building shall be so altered as to reduce the number, width or protection of exits to less than that required.
- 10.2.5 Exits shall be clearly visible and the routes to reach the exit shall be clearly marked and sign posted to guide the population of the floor concerned. Signs shall be illuminated and wired to an independent electrical circuit on an alternative source of supply.

- 10.2.6 Where necessary, adequate and reliable illumination shall be provided for exits.
- 10.2.7 All exits from the auditorium shall be clearly indicated by the word 'EXIT' in block letters 175 mm high and shall be so displayed as to be clearly visible in the light as well as in the dark.
- 10.2.8 Where a door is not required for exit it shall be marked with words 'NO EXIT' in red letters of size as indicated in 10.2.7.
- 10.2.9 Fire-resisting doors shail be provided at appropriate place along the escape routes to prevent spread of fire and smoke, and particularly at the entrance to lifts and stairs where a 'funnel or flue effect' may be created, inducting an upward spread of fire.
- 10.2.10 No mirrors shall be placed in or adjacent to any exitway in such a manner as to confuse the direction of exit.
- 10.2.11 Places of assembly in buildings of other occupancy may use exits common to the place of assembly and the other occupancy. Provided the assembly area and the other occupancy are considered separately, each has exits sufficient to meet the requirements of the Code.
- 10.2.12 Exits shall be sufficient for simultaneous occupancy of both the places of assembly and other parts of the building, unless the Authority determines that the conditions are such that simultaneous occupancy will not occur.
- 10.2.13 All exits shall provide continuous means of egress to the exterior of a building or to an exterior open space leading to a street.
- 10.2.14 Exits shall be so arranged that they may be reached without passing through another occupied unit.
- 10.2.15 For any place of assembly for over 1 000 persons, at least half the required means of exits shall lead directly outdoors or through exitways completely separated from exits serving other parts of the building.
- 10.3 Number and Size of Exits The requisite number and size of various exits from each floor and tier in the auditorium shall be determined in relation to number of persons who may be accommodated on that floor or tier and shall be based on the occupant load capacity of exits, travel distance and height of buildings in accordance with provisions of 10.3.1 (ses also 10.4).

#### 10.3.1 Occupant Load

10.3.1.1 For determining the exits required, the number of persons within any floor area or the occupant load shall be based on the actual number of occupants, but in no case less than the values as given below:

Occupant Load ( Gross Area\* in m2/Person )

a) †With fixed or loose seats and dance floors	0.6‡
b) Without seating facilities including dining rooms	1.5‡
c) For fover and similar waiting spaces	0.38

10.3.1.2 Mazzanine - The occupant load of a mazzanine floor discharging to a floor below shall be added to that floor occupancy and the capacity of the exits shall be designed for the total occupancy load thus established.

#### 10.3.2 Capacity of Exits

- 10.3.2.1 The unit of exit width, used to measure the capacity of any exit, shall be 50 cm. A clear width of 25 cm shall be counted as an additional half unit. Clear widths less than 25 cm shall not be counted for exit width.
- 10.3.2.2 The capacity of exits (doors, corridors, stairways and ramps) indicating the number of persons that could be safely evacuated through a unit width of 50 cm shall be in accordance with the following values:

Number of Occupants per Unit Exit Width

a) For stairways	40
b) For ramps	50
e) For doors/corridors	60

10.3.2.3 Horizontal Exit Allowance — When horizontal exit is provided in buildings, the capacity per storey per unit width of exit of stairways given in 10.3.2.2 may be increased by 50 percent.

<sup>\*</sup>The gross area shall mean plinth area or covered area.

<sup>†</sup>The occupant load for an assembly area having fixed seats shall also be determined by the number of fixed seats installed.

<sup>‡</sup>The gross area shall include, in addition to the main assembly room or space any occupied connecting room or space in the same storey or in the storeys above or below where entrance is common to such rooms and spaces and they are available for use by the occupants of the assembly place. No deductions shall be made in the gross area for corridors, closets or other subdivisions; the area shall include all space serving the particular assembly occupancy. §Such exits shall be in addition to the exits specified for the main auditorium

area.

- 10.3.3 Arrangement of Exits
- 10.3.3.1 Exits shall be so located that the travel distance on the floor shall not exceed 30 m.
- 10.3.3.2 The travel distance to an exit from the dead end of a corridor shall not exceed 6 m.
- 10.3.3.3 Wherever more than one exit is required for any room space or floor of a building, exits shall be placed as remote from each other as possible and shall be arranged to provide direct access in separate directions from any point in the area served.

#### 10.4 Number of Exits

- 10.4.1 Every place of assembly for over 1 000 persons shall have at least four separate exits as remote from each other as practicable.
- 10.4.2 Every place of assembly for less than 1 000 persons shall have at least two separate exits as remote from each other as practicable and if capacity over 600, at least three separate exits shall be provided with each exit not less than of 2 unit widths.

#### 10.5 Doorways

- 10.5.1 Every exit doorway shall open into an enclosed stairway, or a horizontal exit of a corridor or passageway providing continuous and protected means of egress.
- 10.5.2 No exit doorway shall be less than 100 cm in width. Doorways shall be not less than 200 cm in height.
- 10.5.3 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 90 cm; overhead or sliding doors shall not be installed.
- 10.5.4 Exit door shall not open immediately upon a flight of stairs; a landing equal to at least the width of the door shall be provided in the stairway at each doorway; the level of landing shall be the same as that of the floor which it serves.
- 10.5.5 Exit doorways shall be openable from the side which they service without the use of a key.

# 10.6 Corridors and Passageways

10.6.1 Exit corridors and passageways shall be of width not less than the aggregate required width of exit doorways leading from them in the direction of travel to the exterior.

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

#### 10.7 Internal Staircases

- 10.7.1 Interior stairs shall be constructed of non-combustible materials throughout.
- 10.7.2 Interior staircase shall be constructed as a self-contained unit with an external wall constituting at least one of its sides and shall be completely enclosed.
- 10.7.3 A staircase shall not be arranged round a lift shaft unless the latter is totally enclosed by a material of fire-resistance rating as that for type of construction itself.
  - 10.7.4 Hollow combustible construction shall not be permitted.
  - 10.7.5 No gas piping shall be laid in the stairway.
- 10.7.6 Hand rails shall be provided at a minimum height of 100 cm to be measured from the base of the middle of the treads to the top of the hand rails. Further, the gap between the two verticals shall not exceed 30 cm. This gap shall be reduced to 15 cm where children are likely to use the staircase.
- 10.7.7 The number of people in between floor landings in staircase shall not be less than the population on each floor for the purpose of design of staircase.
- 10.7.8 Winders shall not be permitted in the case of stairs turning at an angle.

# 10.8 Fire Escapes or External Stairs

- 10.8.1 Fire escapes shall not be taken into account in calculating the evacuation time of a building.
  - 10.8.2 All fire escapes shall be directly connected to the ground.
- 10.8.3 Entrance to the fire escape shall be separate and remote from the internal staircase,
- 10.8.4 Care shall be taken to ensure that the wall opening or window opens on to or closes to a fire escape.
- 10.8.5 The route to the fire escape shall be free of obstructions at all times.
- 10.8.6 The fire escape shall be constructed of non-combustible materials and any doorway leading to the fire escape shall have the required fire resistance.

- 10.8.7 No staircase, used as a fire escape, shall be inclined at an angle greater than 45° from the horizontal.
- 10.8.8 Fire escape stairs shall have straight flight not less than 75 cm wide with 20 cm treads and risers not more than 19 cm. The number of risers shall be limited to 15 per flight.
  - 10.8.9 Hand rails shall be of a height not less than 100 cm.

#### 10.9 Roof Exit

10.9.1 In buildings over three storeys in height where the slope of the roof is less than 20°, direct access to the roof shall be provided from the street by means of a stairway. Where roofs are used as roof gardens or for other habitable purposes, sufficient stairways shall be extended to them to provide the necessary exit facilities required for such occupancy.

#### 10.10 Horizontal Exits

- 10.10.1 The width of horizontal exit shall be same as for the exit doorways.
- 10.10.2 A horizontal exit shall be equipped with at least one fire door of self-closing type.
- 10.10.3 Floor area on the opposite or refuge side of a horizontal exit shall be sufficient to accommodate occupants of the floor areas served, allowing not less than 0.3 m²/person. The refuge area into which a horizontal exit leads shall be provided which exits adequate to meet the requirements of this part. At least one of the exits shall lead directly to the exterior of the building or to a street.
- 10.10.4 Where there is a difference in level between connected areas for horizontal exits, ramps, not more than 1 in 10 in slope shall be provided; steps shall not be used.
- 10.10.5 Doors in horizontal exits shall be openable at all times from both sides.

# 10.11 Ramps

- 10.11.1 Ramps where provided shall be so located as to be easily visible to the users.
- 10.11.2 Ramps shall comply with all the applicable requirements for stairways regarding enclosure, capacity and limiting dimensions.
- 10.11.3 The slope of a ramp shall not exceed 1 in 10. In certain cases, steeper slopes may be permitted but in no case greater than 1 in 8.

10.11.4 For all slopes exceeding 1 in 10 and wherever the use is such as to involve danger of slipping. The ramp shall be surfaced with approved non-slipping material.

#### 10.12 Aisles

- 10.12.1 Clear aisles not less than 1.2 m in width shall be formed at right angles to the line of seating in such number and manner that no seat shall be more than seven seats away from an aisle. Rows of seats opening on to an aisle at one end only shall have not more than seven seats.
- 10.12.1.1 Under the conditions, where all these aisles do not directly meet the exit doors, cross-aisles shall be provided parallel to the line of seating so as to provide direct access to the exit provided that not more than one cross-aisle for every 10 rows shall be required. The width of cross aisles shall be a minimum of 1 m.
- 10.12.2 Where possible, gradients or inclined planes shall be used instead of steps but no gradient or inclined plane shall be steeper than 1 in 10.
- 10.12.3 If steps have to be inserted in a gangway or passage, there shall be not less than three steps at any one place. The treads shall not be less than 30 cm and risers not more than 15 cm.
- 10.12.4 All gangways and treads of steps shall be maintained with non-slippery surfaces and shall be kept well illuminated.
- 10.12.5 Druggets matting and floor covering if provided in gangways shall be securely fastened to the floor.
- 10.12.6 Exits and the gangways and passages leading to exit shall be kept clear of any obstruction other than rope barriers provided in accordance with 10.12.7. On no account shall extra seats be placed in the gangways or spectators be allowed to stand in the gangways at the time of performance in such a way as to block or reduce their effective width.
- 10.12.7 Rope barriers in gangways or elsewhere shall be fitted with clips or fastenings which will part in the centre on slight pressure and shall not trail on the floor.
- 10.12.8 The fascia of boxes, balconies and galleries shall have substantial railings not less than 65 cm high above the floor. The railings at the end of aisles extending to the fascia shall be not less than 75 cm high for the width of the aisle or 90 cm high at the foot of steps.

10.12.9 Cross-aisles except where the back of seats on the front of the aisle project 60 cm or more above the floor of the aisle, shall be provided with railings not less thau 90 cm high.

#### 11. STRUCTURAL SAFETY

11.1 The structural stability of building shall be ensured to take care of the loads, forces coming on different areas of cinema building as well as material used for construction. This shall be done in accordance with Part VI Structural design of SP: 7-1983\*.

#### 12. CONSTRUCTIONAL PRACTICES AND SAFETY

12.1 Construction of all elements of a building, storage, stacking and handling of materials, safety of personnel during construction operations for all elements of a building and demolition of buildings shall be in accordance with Part VII Constructional practices and safety of SP: 7-1983\*.

#### 13. FUNCTIONAL REQUIREMENTS

#### 13.1 Lighting and Ventilation

13.1.1 Recommended values of illumination for different locations of a cinema building shall be as follows:

Locations	Illumination, lux
a) Foyers	150
b) Auditoria	50
c) Corridors	70
d) Stairs/Ramps	100

- 13.1.2 General ventilation involves providing a building with relatively large quantities of outside air in order to improve general environment of building. They may be achieved in any one of the following ways:
  - a) Natural supply and natural exhaust of air;
  - b) Natural supply and mechanical exhaust of air;
  - c) Mechanical supply and natural exhaust of air; and
  - d) Mechanical supply and mechanical exhaust of air.
- 13.1.3 Recommended values for air changes in case of a cinema building with non-smoking shall be 6 to 9 per hour.
- 13.1.4 Unless the auditorium is air-conditioned, the means of ventilation shall take the form of natural ventilation and power driven exhaust fans suitably located and of adequate size for the purpose intended.

<sup>\*</sup>National Building Code of India 1983.

- 13.1.5 In case more than one exhibition is given on any day, the whole of the auditorium shall be flushed with air and all means of exhaust, fans, air-conditioning units, if any and/or air cooling units shall not be allowed during this period to remain idle.
- 13.1.6 For information regarding requirements and methods for lighting and ventilation, reference may be made to Part VIII Building services, Section 1 Lighting and ventilation of SP: 7-1983\*.

#### 13.2 Air-conditioning and Heating

- 13.2.1 Where desired temperatures and humidities cannot be obtained by ventilation, air-conditioning is resorted to.
- 13.2.2 All plans, specifications and data for air-conditioning and heating systems of the building shall be supplied to the Authority, where called for.
- 13.2.3 The plans for heating and air-conditioning systems shall include all details and data necessary for review of installation, such as:
  - a) building: name, type and location;
  - b) owner: name;
  - c) orientation: north point on plans;
  - d) general plans: dimensions and height of all rooms;
  - e) intended use of all rooms;
  - f) detail or description of wall construction, including insulation and finish;
  - g) detail or description of roof, ceiling and floor construction, including insulation and finish;
  - h) detail or description of windows and outside doors, including size, weather stripping, storm sash, sills, storm doors, etc;
  - j) layout showing the location, size and construction of the cooling tower (apparatus), duets, distribution system;
  - k) information regarding location, sizes and capacity of air distribution system, refrigeration and heating plant, air handling equipment;
  - m) information regarding type of dampers used in air-conditioning supply grille system;
  - n) chimney or gas vent size, shape and height;

<sup>\*</sup>National Building Code of India 1983.

- p) internal equipment load, such as number of people, motor, heaters and lighting load; and
- q) location and grade of the required fire separations.
- 13.2.4 Preplanning In the event of buildings not being air-conditioned at the time of construction and proposed to be air-conditioned at a later stage, provisions for structural and other requirements of the system shall be made at the planning stage.
- 13.2.5 In air-conditioned buildings, inside temperature shall be  $25.5 \pm 2.75$ °C.
- 13.2.6 In an air-conditioned auditorium, the total minimum outside fresh air introduced into an enclosure by an air-conditioning plant or unit shall be related to the number of occupants in the enclosure at any time, whether they are smokers or non-smokers and to the cubic contents of the enclosed space in the manner as specified below:

Air Requirements	$\mathbf{m^g/min}$	Smoking
Recommended	Minimum	· ·
0.21	0.14	None
0.42	0.28	Some

13.2.7 In the event of a break down of the air-conditioning plant, alternate arrangements should be available for ventilation and air circulation.

# **13.2.8** Heating

- 13.2.8.1 Central systems The installation for air-conditioning system may be used advantageously for the central heating system with such additions as a hot water or steam boiler, heating coils, thermostats, etc.
- 13.2.8.2 Unit systems The common unit systems include individual heating units, steam boiler units (oil or gas fired) and gas units. The construction and operation of these individual units shall satisfy the local byelaws with regard to safety in operation and safety of occupants.
  - 13.2.8.3 Safety controls should be used with electric strip heaters.
- 13.2.9 For information regarding design, construction and installation of air-conditioning and heating systems and equipment installed in buildings for the purpose of providing and maintaining conditions of air temperature, humidity, purity and distribution suitable for the use and occupancy of the space, reference may be made to Part VIII Building services, Section 3 Air-conditioning and heating of SP: 7-1983\*.

<sup>\*</sup>National Building Code of India 1983.

#### 13.3 Sound Insulation and Acoustical Requirements

- 13.3.1 The generally acceptable noise levels inside auditorium from point of view of comfort, economy and other practical consideration shall be 35 to 40 dB(A).
- 13.3.2 Adequate acoustical treatment shall be given in the projection room for suppressing the noises emanating in the room and also to provide satisfactory listening conditions.
- 13.3.3 For information regarding the desired noise levels and sound insulation, reference may be made to Part VIII Building services, Section 4 Acoutics, sound insulation and noise control of SP: 7-1983\*. The acoustical design of auditorium shall be done in accordance with IS: 252t-1963\*.

# 13.4 Visibility Requirements

- 13.4.1 The distance between screen and the front row of seats shall not be less than width of the screen itself provided in case of cinemascope or other similar modern techniques. This shall not be less than 3/4 of effective width of screen; and in case of 70 mm presentations, it shall be not less than 11.40 m. The distance between screen and the front row of seats shall be subject to the angle of elevation to the top edge of the projected picture on the screen to the centre of plane passing through the observer's eyes and normal to the back line not exceeding 35°. Where curved screen is used, the distance of the viewer from the nearest point on the screen shall be not less than 0.2 effective width.
- 13.4.2 The elevation of the balcony seats should be such that line of sight to the centre of screen should not be inclined more than 30° to the horizontal.
- 13.4.3 The seats should be so arranged that good visibility is achieved for a spectator.
- 13.4.4 The floor slopes shall be so arranged that every viewer is provided with good visibility and listening conditions. The elevation is based on the principle that each listener shall be elevated with respect to the person immediately in front of him, so that the listener's head is about 12 cm above the path of sound which would pass over the head of the personin front of him. It is possible to reduce this to 8 cm if the seats are staggered.
  - 13.4.5 Screen luminance shall be in accordance with IS: 5353-1969‡.

<sup>\*</sup>National Building Code of India 1983.

<sup>†</sup>Code of practice for acoustical design of auditoriums and conference halls.

<sup>‡</sup>Specification for screen luminance for the projection of 35 mm film on matt and directional screens.

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# 13.5 Seating Requirements

- 13.5.1 The seating shall be so arranged that there is free access to the exits.
- 13.5.2 An average width of seats shall be not less than 50 cm and the minimum width of seats shall be 45 cm.
- 13.5.3 The spacing of rows of seats from back to back shall be not less than 90 cm.
- 13.5.4 In all cases there shall be an intervening space of at least  $30.5\,\mathrm{cm}$  between the back of one seat and the front of the seat immediately behind measured between perpendiculars.
- 13.5.5 All seats except in boxes shall be securely fixed to the floor and if battened together or made of links, the complete link shall be firmly attached to the floor.

#### 13.6 Provisions for Lifts

- 13.6.1 Provision for lifts shall be made for buildings more than 15 m in height.
- 13.6.2 The appropriate aspect of lift installation shall be discussed during the preliminary planning of the building with all the concerned parties namely, client, architect, consulting engineer and/or lift manufacturer. This enables the lift manufacturer to furnish the architect and/or consulting engineer with the proposed layout or vice-versa.
- 13.6.3 As a result of preliminary discussion, the drawings of the building should give the following particulars and finished sizes:
  - a) number of lifts and size and position of lift well;
  - b) particulars of lift well enclosures;
  - c) size, position, number and type of landing doors;
  - d) number of floors served by the floor;
  - e) height between floor levels;
  - f) number of entrances;
  - g) total headroom;
  - h) provision of access to machine room;
  - j) provision of ventilation and, if possible, natural lighting of machine room;
  - k) height of machine room;
  - m) depth of lift pit;

- n) position of lift machine, above or below lift well;
- p) size and position of any trimmer joists or stanchions adjacent to the lift well at each floor;
- q) size and position or supporting steel work at roof levels;
- r) size and position of any footings or grillage foundations, if these are adjacent to the lift pit; and
- s) in the case of passenger lifts whether the lift cage is required to carry household luggage, such as refrigerator, steel almirah, etc.
- 13.6.3.1 The architect/engineer should advise the lift manufacturer, if the Authority has any special requirements regarding lifts in buildings in the administrative area concerned.
- 13.6.3.2 When submitting application for a building permit to the local Authority, the building plans shall include the details of lifts (No. of lifts duly numbered, location, type, type of doors, passenger capacity and speed).
- 13.6.4 Planning and designing of lifts shall be done in accordance with the provisions given in Part VIII Building services, Section 5 Installation of lifts and escalators of SP: 7-1983\*.

#### 14. ELECTRICAL INSTALLATIONS

#### 14.1 Execution of Work

14.1.1 Unless otherwise exempted under the appropriate rule of the Indian Electricity Rules, the work of electrical installations shall be carried out by an electrical contractor licensed and under the direct supervision of a person holding a certificate of competency and by persons holding a valid permit issued and recognized by any Indian government.

# 14.2 Planning

- 14.2.1 General The design and planning of an electrical wiring installation involve consideration of all prevailing conditions, and is usually influenced by the type and requirement of the consumer. It is recommended that the advice of a competent electrical engineer be sought at the planning stage with a view to providing for an installation that will prove adequate for its intended purpose and safe and efficient in its use.
- 14.2.1.1 The design and planning of an electrical wiring installation shall take into consideration, some or all of the following:
  - a) The type of supply, occupancy, envisaged load and the earthing arrangement available;

<sup>\*</sup>National Building Code of India 1983.

- b) The atmospheric condition, such as cooling air temperature, moisture or such other conditions which are likely to affect the installation adversely;
- c) The possible presence of inflammable or explosive dust, vapour or gas;
- d) The degree of electrical and mechanical protection necessary;
- e) The importance of continuity of service including the possible need for stand by supply;
- f) The probability of need for modification or future extension;
- g) The probable operation and maintenance cost taking into account the electricity supply tariffs available;
- h) The relative cost of various alternative methods;
- j) The need for radio and telecommunication interference suppression;
- k) Ease of maintenance;
- m) Safety aspects; and
- n) Energy conservation.
- 14.2.1.2 All electrial apparatus shall be suitable for the services these are intended for.
- 14.2.1.3 Co-ordination Proper co-ordination and collaboration between the architect, civil engineer and the electrical and mechanical engineer shall be effected from the planning stage of the installation. The provisions that will be needed for the accommodation of substation, transformer, switchrooms, service cable ducts, rising mains and distribution cables, sub-distribution boards, openings and chases in floors and walls for all required electrical installations, etc, shall be specified in advance.
- 14.2.1.4 Before starting wiring and installation of fittings and accessories, information should be exchanged between the owner of the building/architect/electrical contractor and the local supply authority in respect of tariffs applicable, types of apparatus that may be connected under each tariff, requirement of space for installing meters, switches, etc, and for total load requirements of lights, fans and power.
- 14.2.1.5 While planning an installation consideration should be taken of the anticipated increase in the use of electricity for lighting, general purpose socket-outlet, etc.

It is essential that adequate provision should be made for all the services which may be required immediately and during the intended useful life of the building.

14.2.2 For detailed planning requirements of electrical installations with regard to location and requirements of sub-station, main switches, switchboards, distribution boards, etc, reference may be made to Part VIII Building services, Section 2 Electrical installations of SP: 7-1983\*.

#### 14.3 Branch Circuits

- 14.3.1 The branch circuits shall, in general, cater to the following individual load groups:
  - a) Power installation:
    - i) Stage machinery;
    - ii) Ventilation and air-conditioning installation;
    - iii) Lifts; and
    - iv) Additional power connections.
  - b) Lighting:
    - i) In front of the theatre such as general lighting of outdoor, foyer, corridors and stairs, and auditorium;
    - ii) In the rear of the theatre for stage; workshops and storehouses; and
  - c) Emergency supply.
- 14.3.2 The electrical lighting of the main building shall have at least three separate and distinct main circuits as follows:
  - a) For the enclosures (cabin) and hence through a dimmer regulator to the central lighting of the auditorium;
  - b) For one half of the auditorium, passageways, stairways, exit and parts of the building open to public; and
  - c) For the remaining half of the auditorium, passageways, stairways exit and parts of the building.
- 14.3.3 The control of the circuits in respect of the two halves of the auditorium referred to in 14.3.2 shall be remote from each other.
- 14.3.4 The cabin shall be provided with two separate circuits, one feeding the cabin equipments and the other to lights and fans.
- 14.3.5 Wiring shall be of the conduit type. Ends of conduits shall enter and be mechanically secured to the switch, control gears, equipment terminal boxes, etc. Ends of conduits shall be provided with screwed bushes. Within the enclosure, all cables shall be enclosed in screwed metal conduits adequately earthed. PVC conduits may be used in the auditorium and other places.

<sup>\*</sup>National Building Code of India 1983.

- 14.3.6 Temporay wiring shall not be allowed in cabin, rewinding room, queue sheds and similar places.
- 14.3.7 The cabin equipment shall be accessible at all times. Nothing shall impede access to any part of the equipment or its control.
- 14.3.8 Linked tumbler switches shall not be used for the control of circuits.
- 14.3.9 Branch and Main Distribution Boards shall be mounted at suitable height not higher than 2 m from the floor level. A front clearance of 1 m should also be provided.
- 14.3.10 Wood work shall not be used for the mounting of or construction of the frame work for iron-clad switch and Distribution Boards and control gear.
- 14.3.11 All the lighting fittings shall be at a height of not less than 2.25 m.
- 14.3.12 The single pole switches for the individual lights and fans shall be mounted on sheet steel boards suitably earthed.
- 14.3.13 Suitable socket outlets with controls shall be provided on the side walls near the stage for tapping supply to screen motor, stage focussing lights, audio systems and portable lights.
  - 14.3.14 In the queue sheds, bulk head fittings shall be used.
- 14.3.15 For outdoor lighting, water tight fittings shall be used and fittings may be so mounted without spoiling the aesthetic view of the building.
- 14.3.16 The plug points shall be provided at a height of about 1.5 m from the floor.
- 14.3.17 When a tapping is taken from the open yard wiring, it shou d be taken only at a point of support through porcelain connectors housed in a junction box, fixed to the supporting pole.
- 14.4 For detailded requirements regarding safety and related matter in electrical installations, reference may be made to Part III Electrical installations in non-industrial buildings, Section 3 Recreational, assembly buildings of SP: 30-1984\* to be read in conjunction with other relevant Parts and Sections. Electrical installations in multistoreyed buildings shall be done in accordance with Appendix to Part III of SP: 30-1984\*.

<sup>\*</sup>National Electrical Code.

# 14.5 Emergency Supply

- 14.5.1 Sufficient number of emergency lights fed from independent source or sources, with the provision for automatic switching-on in case of failure of main supply shall be provided.
- 14.5.2 Depending on the total capacity required for standby supply for the occupancy, suitable generator set shall be installed. The location of the standby supply shall preferably be on the ground level away from the auditorium so that noise from the generator reaching the audience could be minimized. The changeover of supply arrangements should be reliable and easy to operate.
- 14.6 Audio-visual System Installation of amplifying and sound distribution systems shall conform to the guidelines contained in Part I General and common aspects, Section 14 Electrical aspects of building services SP: 30-1984\*.

#### 15. FIRE PROTECTION

#### 15.1 Types of Construction

- 15.1.1 The design of any building and the type of materials used in its construction are important factors in making the building resistant to a complete burn-out and in preventing the rapid spread of fire, smoke or fumes, which may otherwise contribute to the bars of lines and property.
- 15.1.2 The fire resistance ratings for various types of construction for structural and non-structural members should be as given in Table 3.
- 15.2 Mixed Occupancy When any building is used for more than one type of occupancy, it shall conform to the requirements for the most hazardous of the occupancies. If mixed occupancies are separated by a separating wall of 4 h fire rating, the occupancies shall be treated individually.
- 15.3 At the time of designing openings in separating walls and floors, particular attention shall be paid to all such factors as will limit fire spread through these openings.
- 15.4 Openings in an external wall shall be protected with fire-resisting assemblies or enclosures having a fire resistance equal to that of the wall or floor in which these are situated.
- 15.5 Where fire-resisting doors are employed as 'cut-offs' or 'fire breaks', they shall be maintained in good working order, free from any obstruction, so that they may be readily opened to allow quick escape of any person or persons trapped in that section of the building, and also, when necessary, prompt rescue work can be expeditiously carried out.

<sup>\*</sup>National Electrical Code.

# TABLE 3 FIRE RESISTANCE RATINGS OF STRUCTURAL ELEMENTS

( Clause 15.1.2 )

	STRUCTURAL ELEMENT	1	FIRE RESISTANCE RATINGS ( in hours )
1)	Exterior walls		
	Fire separation less than 3.7 m	Bearing Non-Bearing	<b>4</b> 2
	Fire separation of 3.7 m or more but less than 9 m	Bearing Non-Bearing	4 1½
	Fire separation of 9 m or more	Bearing Non-Bearing	4 1
2)	Fire walls and party walls		4
3)	Fire separation assemblies		4
4)	Fire enclosures of exitways and stairways		2
5)	Shaft other than exitways, elevator hoistways		2
6)	Exitway access corridors		1
7)	Non-bearing partitions		$\frac{1}{2}$
8)	Interior bearing walls bearing partitions, columns, girders, trusses ( other than roof tru- sses ) and framing	Supporting more than one floor	4
		Supporting one flo	or 3
		Supporting a ro	oof 3
9)	Structural members support- ing wall		3
10)	Floor construction, including beams		3
11)	Roof construction, including beams, trusses and framing arches and roof deck	5 m or less in heig to lowest membe	
		More than 5 m beless than 6.7 m height to lower member	in
	·	6·7 m or more height to low member	

- 15.6 Life shafts and stairways serve as flues or funnels thus increasing the fire by increased draught and their designs shall be of enclosed type as to reduce or avoid possibility and consequent spread of fire.
- 15.7 Surface furnishes on walls (including external facade of the building) and ceilings shall be of such finishing materials so as to minimize spread of flame in case of fire.

# 15.8 Air-Conditioning and Ventilation

- 15.8.1 Air-conditioning and ventilating systems shall be so installed and maintained as to minimize the danger of spread of fire, smoke or fumes thereby from one floor or fire area to another, or from outside into any occupied building or structure.
- 15.8.2 Air-conditioning and ventilating systems circulating air to more than one floor or fire area shall be provided with dampers designed to close automatically in case of fire and thereby prevent spread of fire or smoke. Such a system shall 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 shall be designed to remain in operation.
- 15.8.3 Air-conditioning system serving large places of assembly (over 1 000 persons), shall be provided with effective means for preventing circulation of smoke through the system in the case of a fire in air filters or from other sources drawn into the system even though there is insufficient heat to actuate heat sensitive devices controlling fans or dampers. Such means shall consist of approved photo-electric or other effective smoke sensitive controls, or if approved by the Authority, may be manually operated controls in cases where qualified personnel responsible for operation of controls are continuously on duty while the premises are occupied.

# 15.9 Basements (Including Sub-basements)

- 15.9.1 Where basements are necessary for a building and where such basements are used for storage, provisions shall be made for the escape of any heat arising due to fire and for liberating any smoke which may be used.
- 15.9.2 The access to the basement shall be separate from the main and alternative staircase providing access and exit from higher floors. Where the staircase is continuous in the case of buildings served by more than one staircase, the same shall be of enclosed type serving as a fire separation from the basement floor and higher floors. Open ramps shall be permitted if they are constructed within the building line in case adequate arrangements shall be made such that surface drainage does not enter the basement.

#### 15.10 Fixed Fire Fighting Installations

- 15.10.1 Static Water Storage Tanks Underground static storage tank of at least 50 000 litres for buildings of height up to 15 m shall always be available for the purposes of fire fighting with arrangements of replenishment by main or alternative source of supply at the rate of 1 000 litres per minute. When this is not practicable, the capacity of static storage tank(s) shall be increased proportionately in consultation with the local fire brigade.
- 15.10.1.1 The static storage water supply required shall 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 insertion of suction hose; etc. The covering slab shall be able to withstand the vehicular load of 18 tonnes.
- 15.10.1.2 The domestic suction tank connected to the static water storage tank shall have an overflow capable of discharging 2 250 litres per minute to a visible drain point from which by a separate conduit the overflow shall be conveyed to a storm water drain:
  - a) 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.
  - b) The static water storage tank shall be provided with a fire brigade collecting breaching with 4 number 63 mm dia (2 number 63 mm dia for pump with capacity 1 400 litres/minute) instantaneous male inlets arranged in a valve box at a suitable point at street level and connected to the static tank by a suitable fixed pipe not less than 15 cm in dia to discharge water into the tank when required at the rate of 2 250 litres per minute.
- 15.10.2 Automatic Sprinklers Automatic sprinklers shall be installed in basements/multi-level used as car parks, any room or other compartment of a building exceeding 500 m², all floors of mixed occupancy which constitute a hazard and not provided with staircases independent of remainder of the buildings, stages and stage basements of theatres.
- 15.10.3 Automatic High Velocity Water Spray or Emulsifying System Automatic high velocity water spray or emulsifying system shall be provided for protection of indoor transformers.
- 15.10.4 Fixed Foam Installation Fixed foam generating system shall be provided for protection of boiler rooms with its ancillary storage of furnace oils in basement.

#### 15.10.5 Portable Fire Extinguishers

- 15.10.5.1 Portable fire extinguishers (Soda Acid) conforming to IS: 934-1976\* shall be provided at the rate of one fire extinguisher for every 100 seats or part thereof.
- 15.10.5.2 The extinguisher shall be so located that no point within the floor area covered is more than 15 m from the nearest extinguisher by the normal route of travel.
- 15.10.5.3 The extinguishers shall be placed on rackets/nitches on the wall near each exit, 1.2 m from the floor level. They shall be easily accessible and the passages leading to the extinguishers shall not be obstructed in any way.
- 15.10.5.4 Directions for using the extinguishers shall in all cases be prominently painted on the extinguisher and the attention of the public shall be directed to them by placards legibly printed or painted and fixed immediately above them.
- 15.10.5.5 Portable fire extinguishers of CO<sub>2</sub>/Dry chemical powder type shall be provided in all enclosures housing projection machine, rectifier, rewinding room, and near electrical installations including airconditioning plant room, transformer room, etc, as specified by the local fire authority.
- 15.10.5.6 Portable fire extinguishers shall be renewed or well cleaned and recharged every 12 months and shall be subject to annual approval of local fire Authority, a record of which shall be kept for inspection in accordance with IS: 2190-1979†.
- 15.10.6 Fire fighting equipment shall be suitably located and clearly marked by illuminated signs, wired to an independent electric circuit on an alternate source of supply.
- 15.10.7 Adequate technical staff trained in fire fighting shall be maintained by the licensee. Attendants and staff shall be drilled periodically at least once in every month to train them in the use of all fire-fighting equipment maintained in the premises.
- 15.10.8 During an exhibition all fire extinguishing appliances shall be in charge of some person or persons specially appointed for this purpose. Such persons need not be employed exclusively for looking after the fire appliances but they must not be given any other work during an exhibition which would take them away from the building or otherwise prevent them

<sup>\*</sup>Specification for portable chemical fire extinguisher, soda acid type (third revision), †Code of practice for selection, installation and maintenance of portable first-aid fire appliances (second revision).

from being immediately available in case of danger or alarm of fire. The person so appointed shall wear a badge on its arm depicting the word 'FIRE' during the exhibition.

- 15.10.9 The instructions to be followed in case of fire shall always be posted in some conspicuous place, so that all people connected with the cinema shall be acquainted with their contents.
- 15.10.10 All films not in use shall be kept securely closed in fire resisting receptacles.
- 15.10.11 Automatic fire alarm system conforming to IS: 2189-1976\* shall be installed in auditoria, corridor, foyer, canteen, and the space used for storage purposes so that any fire is detected at its very inception and the first-aid fire-fighting appliances put into operation immediately.
- 15.10.12 A report of any fire or alarm of fire, however, slight shall be at once sent to the Fire Brigade.
- 15.10.13 The fire fighting appliances shall be distributed over the building in such a manner so as to be readily available in case of fire in any part of the building and shall be regularly maintained, inspected and tested in accordance with the requirements laid down in IS: 2190-1979†.
- 15.10.13.1 Additional precautionary measures in regard to fire fighting arrangements shall be provided as per the requirements of local fire Authority.
- 15.11 The premises of cinemas shall be so arranged as to be in communication with the nearest fire station by means of a telephone. The telephone shall be fitted in such a place and in such a manner as the competent authority may direct. The installation and maintenance of the telephone (complete telephone connection) shall be carried out by the licensee at his own cost.
- 15.12 Lighting conductors shall be provided in each cinema building in accordance with the requirements given in IS: 2309-1969t.
- 15.13 Requirements for exits to be provided in cinema buildings shall be in accordance with 10.

†Code of practice for selection, installation and maintenance of portable first-aid fire

appliances (second revision ).

<sup>\*</sup>Code of practice for installation of automatic fire or alarm system using heat sensitive type fire detectors (first revision).

<sup>‡</sup>Code of practice for the protection of buildings and allied structures against lighting (first revision).

# 15.14 Special Hazards

- 15.14.1 Seats in places of public assembly, accommodating more than 300 persons, shall be securely fastened to the floor. All seats in balconies and galleries shall be securely fastened to the floor, except that in nailed-in-enclosures, boxes with level floors and having not more than 14 seats, the seats need not be fastened.
- 15.14.2 Rooms containing high pressure boilers, refrigerating machinery of other than domestic refrigerator type, large transformers or other service equipment subject to possible explosion shall not be located directly under or adjacent to the required exits. All such rooms shall be effectively cut off from other parts of the building and provided with adequate vents to the outer air.
- 15.14.3 All rooms of areas used for storage of any combustible material or equipment, or for paintings refinishing repair or similar purposes shall be effectively cut off from assembly areas of protected with a standard system of automatic sprinklers. They shall be located away from staircases.
- 15.14.4 Every stage equipped with fly galleries, gridirons and rigging for movable theatre-type scenery, shall have a system of automatic sprinklers over and under such stage areas or spaces and auxiliary spaces, such as dressing rooms, store rooms and workshops, and the proscenium opening shall be provided with a fire-resisting curtain, capable of withstanding a lateral pressure of 4 kN/m² over the entire area. The curtain shall have an emergency closing device capable of causing the curtain to close without the use of power and when so closed, it shall be reasonably tight against the passage of smoke.
- 15.14.5 The stage roof of every theatre using movable scencry or having a motion picture screen of highly combustible construction shall have ventilator or ventilators in or above it, openable from the stage floor by hand and also opening by fusible links or some other approved automatic heat actuated device, to give a free opening equal to at least one-eighth the area of the floor of the stage.
- 15.14.6 Where automatic sprinkler protection is not provided, the proscenium wall of every theatre using movable scenery of decorations shall have, exclusive of the proscenium opening, not more than two openings entering the stage, each not to exceed 2 m and fitted with self-closing fire check doors.
- 15.14.7 Automatic smoke vents shall be installed above the auditorium of theatres, including motion picture houses, with vent area equal to not less than  $3\frac{1}{3}$  percent of the floor area of the auditorium, including

the sum of the floor areas of all balconies, galleries, boxes and tiers. It may be desirable to provide a large number of small vents rather than a small number of large vents.

- 15.14.8 Every cinema building shall have the projection apparatus enclosed in a fire-resisting fixed enclosure known as 'Projection Room'and it shall have the following requirements from the point of view of fire protection.
- 15.14.8.1 The projection room shall not have any direct access or communication with the auditorium. It shall be entirely self-contained and shall house only the cinematograph apparatus, fire appliances and such controlling apparatus as of necessity be placed therein.
- 15.14.8.2 There shall be one entrance and an alternative exit from open air to the projection room suitably spaced and fitted with self-closing fitting door of fire-resisting material opening outwards, and all openings, bushes and joints shall be so constructed and maintained as to prevent, as far as possible, escape of any smoke into the auditorium.
- 15.14.8.3 The enclosure and any fitting covering openings thereto shall be made of fire resisting material and shall be so designed, constructed and maintained as to prevent as far as possible, when all openings are closed, fire in the enclosure spreading to the structural features and fittings of the building, the emission of smoke to any part of the building and egress of air.
- 15.14.8.4 Proper and efficient means of ventilation shall be provided in the enclosure in such a manner that there shall be no communication with any part of the building to which the public is admitted through the medium of such means of ventilation.
- 15.14.8.5 The openings in the front face of a projection room shall be fitted with shutters of non-combustible material so constructed that:
  - a) they can be closed from a point near the projectors and also from a point outside the projection room and rewinding room which is accessible to members of the staff;
  - b) they may, if required, be closed simultaneously; and
  - c) when closed they fit closely over the openings.

Note — The shutters and the mechanism for closing them shall be tested on each day there is a cinematograph exhibition and before the public are admitted to the premises.

#### 15.14.8.6 No smoking shall be permitted:

- a) in any projection or rewinding room or in any room in which film is stored or in which electrical batteries are installed or charged; and
- b) in and immediately outside any such room; notices shall be posted stating that smoking is prohibited.
- 15.14.8.7 No readily inflammable film or naked light, other than arc lights in the lanterns of film projectors, spot-lights effects lamps or other electrical apparatus for the production of lighting or optical effects, shall be permitted to be in any such room.
- 15.14.8.8 Where flammable substance is used in repairing or jointing film there may be kept in the projection and rewinding rooms not more than 5 ml thereof, which shall be kept in a stoppered container.
- 15.14.8.9 There may be kept in the projection and rewinding rooms a reasonable quantity of wax for the purpose of lubricating the film.
- 15.14.8.10 Cinematograph projectors shall be placed on firm support constructed of fire resistant materials and shall be provided with a metal shutter which may be readily inserted between the source of light and the film gate. Thus, this shutter may immediately be dropped in the event of an accident to the cinematograph apparatus or stoppage of the film and shall only be raised when the film is in motion for the purpose of projection.
- 15.15 All cinema buildings including multitstoreyed buildings shall be planned, designed and constructed to ensure fire safety and this shall be done in accordance with Part IV Fire protection of SP: 7-1983\* unless otherwise specified in these byelaws.

# 16. REQUIREMENTS FOR WATER SUPPLY, DRAINAGE AND SANITATION

# 16.1 Water Supply

- 16.1.1 Minimum requirements of water supply for cinema buildings shall be 15 litres per seat per day.
- 16.1.2 Every cinema building shall be provided with drinking water taps/fountains connected to a water supply pipe line in accordance with requirements given in Table 4. In case supply of water is cut-off, there shall be an arrangement to connect the water taps/fountains to a hygienic tank or water container containing pure drinking water.

<sup>\*</sup>National Building Code of India 1983.

- 16.1.3 Provision shall also be made by the owner of the building for water supply requirements for fire fighting purposes within the building, depending upon the height and occupancy of the building.
- 16.1.4 In a building, adequate provision is required to be made for storage of water for the following reasons:
  - a) to provide against interruptions of the supply caused by repairs to mains, etc;
  - b) to reduce the maximum rate of demand on the mains;
  - c) to tide over periods of intermittent supply; and
  - d) to maintain a storage for the fire fighting requirement of the building.

#### 16.2 Drainage and Sanitation

#### 16.2.1 Basements

- 16.2.1.1 Adequate arrangements shall be made such that surface drainage does not enter the basement.
- 16.2.1.2 The walls and floors of the basement shall be watertight and be so designed that the effects of the surrounding soil and moisture, if any, are taken into account in design and adequate damp-proofing treatment is given.

# 16.2.2 Roofs

- 16.2.2.1 The roof of a building shall be so constructed or framed as to permit effectual drainage of the rain water therefrom by means of a sufficiency of rain water pipes of adequate size so arranged, jointed and fixed as to ensure that the rain water is carried away from the building without causing dampness in any part of the walls or foundations of the building or those of an adjacent building.
- 16.2.2.2 The Authority may require rain water pipes to be connected to a drain or sewer to a covered channel formed beneath the public footpath to connect the rain water pipe to the road gutter or in any other approved manner.
- 16.2.2.3 Rain water pipes shall be affixed to the outside of the external walls of the building or in recesses or chases or formed in such external walls or in such other manner as may be approved by the Authority.
- 16.2.3 The requirements for fitments for drainage and sanitation for cinema buildings shall be in accordance with Table 4.

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# TABLE 4 REQUIREMENTS FOR FITMENTS

(Clauses 16.1.2 and 16.2.3)

FITMENTS	FOR MALE PURLIC	FOR FEMALE PUBLIC	FOR MALE STAFF	FOR FEMALE STAFF
(1)	(2)	(3)	(4)	(5)
Water-closets	I per 100 persons up to 400 persons; and for over 400 persons, add at the rate of 1 per 250 persons or part thereof	3 per 100 persons up to 200 persons and for over 200 persons add at the rate of 2 per 100 persons or part thereof	1 for 1 to 15 persons 2 for 16 to 35 per- sons	1 for 1 to 12 persons 2 for 13 to 25 persons
Ablution taps	l in each water- closet	l in each water-closet	l in each water- closet	1 in each water-closet
		ning arrangements shall b ter-closets and urinals	pe provided for every 50	persons or part thereof
Urinals	1 for 25 persons or part thereof	<del>-</del>	Nil up to 6 persons. 1 for 7 to 20 per- sons 2 for 21 to 45 persons	
Wash basins	1 for every 200 persons or part thereof	l for every 200 persons or part thereof	1 for 1 to 15 persons 2 for 16 to 35 per- sons	1 for 1 to 12 persons 2 for 13 to 25 persons
Drinking water taps/ fountains	1 per	100 persons or part thereo	of	······································

Note 1 - Some of the water-closets may be European style, if desired.

Note 2 — It may be assumed that two-thirds of the number are males and one-third females.

16.3 The planning, design, layout, construction and maintenance of water supply, drainage and sanitation shall be done in accordance with Part IX Plumbing services, Section 1 Water supply and Section 2 Drainage and sanitation of SP: 7-1983\*.

# 17. GENERAL REQUIREMENTS

- 17.1 Smoking No smoking shall be permitted in the auditorium during a performance.
- 17.2 Hawking No person shall, during a performance or exhibition or in the interval of performance or exhibition and no licensee or his nominee shall during a performance or exhibition or in the interval of performance or exhibition, allow any person:
  - a) hawking in the auditorium;
  - b) sell or supply any eatables or drinks to any member of the audience in the auditorium itself; and
  - distribute or sell, for consideration or not, any article or thing to any member of the audience in the auditorium itself.
- 17.2.1 The licensee shall make separate space arrangement having area not less than 10 m² for providing for the light refreshment of the spectators during the performance or in the interval of performance. This space may however be attached to the auditorium at the same time not affecting the smooth flow of traffic in the corridors and causing no congestion at any exit.
- 17.3 Spitoons Spitoons of such description in such numbers and in such places as may be prescribed by the Authority shall be provided.
- 17.3.1 No person shall, at any time, spit in any part of the cinema except in the spitoons provided for that purpose.
- 17.4 Booking Windows Booking windows shall be provided in such a manner and number as prescribed by the competent Authority so as not to cause obstruction to sudden rush of public before and after the cinema show, by providing in addition suitable guideways.
- 17.4.1 Suitable shelters for sun and rain and other atmospheric agencies affecting the health of the people shall be provided for the would be purchasers of tickets standing in queues.
- 17.4.2 The guide way and shelter shall be sufficient to accommodate at least one-third of the number of the would be purchasers of tickets.

<sup>\*</sup>National Building Code of India 1983.

17.4.3 The guide ways should be so constructed that it provides an easy flow of the traffic from the entrance to the exit of the booking counter. In case these booking windows are put up as a separate structure isolated from the main building there should be some connected structure between the two blocks such that people after buying the ticket could reach the auditorium or the main building without having to pass through conditions of inclement weather.

#### 17.5 Maintenance of Cleanliness, etc — The licensee shall care:

- a) all windows and other means of ventilation in the building to be maintained in good order;
- b) every part of such building or place to be maintained in proper sanitary conditions;
- c) the walls of the building to be hotlime washed at least once in every two years or more often if so required by the Authority;
- d) the premises to be thoroughly cleaned and all refuge matters to be removed at least once every twenty four hours or more often if so required by the Authority;
- e) electrical equipment such as fans, glass and shades to be periodically cleaned and kept in a presentable condition;
- f) mechanical equipment such as exhaust fans, air-conditioning plant, lift, etc, to be periodically cleaned and inspected to be kept in a working condition;
- g) all fire fighting installations to be periodically inspected to ensure its working conditions;
- h) all storage tanks to be regularly inspected and be cleaned out periodically.

# PART 2 SEMI-PERMANENT CINEMA BUILDINGS

# 18. RESTRICTIONS ON THE GRANT OF NO OBJECTION CERTIFICATES

- 18.1 Semi-permanent cinemas shall be permitted only in towns and cities having a population of less than one lakh and also not having more than three permanent cinemas already functioning there.
- 18.2 The 'No Objection Certificate' granted for a semi-permanent cinemas shall lapse at the end of 5 years provided that Authority may extend the validity of the permit/licence by a further period of 5 years in case the semi-permanant cinema has been converted into permanant cinema buildings within 5 years of the grant of 'No Objection Certificate'.

18.3 Semi-permanent buildings shall not be permitted to be constructed more than one storey unless it is converted into a permanent building by the Authority. However, construction of the basement may be allowed by the Authority in accordance with the land use and other provisions specified under the Development Control Rules.

# 19. OTHER REQUIREMENTS

- 19.1 During the planning of a semi-permanent cinema building, it shall be essential to make all necessary provisions in regard to traffic load, parking spaces, fire fighting, building service installations, water supply, drainage and other safety requirements which would be applicable to permanent cinema buildings on its conversion.
- 19.2 The provisions of 3, 4, 5 (except 5.2), 6, 8, 9 (except 9.2, 9.5 and 9.8), 10 (except 10.8 and 10.9), 11, 12, 13, (except 13.6), 14, 15 and 17 shall mutatis mutantis be applicable to semi-permanent cinema buildings. However, certain administrative requirements as given in 3 such as details to be given in building plan, etc, and other requirements may be relaxed by the Authority for semi-permanent cinema buildings to the extent that other safety requirements are not affected.
- 19.3 The front portion and a portion of the adjacent two sides of the boundary wall around the premises shall be of masonry construction of sufficient height as specified in 9.9 and the remaining portion of the boundary wall shall be of barbed wire fencing so as to prevent outside public from causing any inconvenience to the persons within the premises when the show is on with the side cladding thrown open.
- 19.4 The side walls of the main building shall be dwarf walls of minimum 1.0 m high plastered over which durable black canvas, tarpaulin curtains or other suitable material shall be provided so as to shut off light and offered shelter from rain.

# APPENDIX A

[ Clause 3.6.1 (b) ]

# NOTICE FOR CONSTRUCTION OF CINEMA BUILDING

Please take notice that I	
	age
	*
*** ***	propose locating a permanent/semi-
belonging to Shri	admeasuring
about	and assessed under
	nded as under
cinema should be lodged with the	Authoritydays from
*** ***	

<sup>\*</sup>Full address.

<sup>†</sup>Name of the Authority.

# APPENDIX B

[ Clause 3.6,2 ]

# NOTIFICATION FOR GRANT OF NO OBJECTION CERTIFICATE

Whereas Shri		son of	
***************************************			
of*			
*********	appli appli	led to me for the gr	ant of
a 'No Objection Certificate' for the	e location of a	permanent/semi-p	erma-
nent cinema at	†		on the
land of Shri			
and assessed under			
*****			unacı
***************************************	. ** * * * * * * * * * * * * * * * * *	· · · · · · · · · · · · · · · · · ·	
Notice is hereby given that a	any person havi	ng any objection	to the
grant of a 'No Objection Certifica		-	_
tions in writing with the undersign			
***************************************			
	ions received at	ter that date shall	not be
taken into consideration.			
Given under my hand this			day of
	9		

Licensing Authority

<sup>\*</sup>Full address.

<sup>†</sup>Full description of location of site.

<sup>‡</sup>Name of the Authority.

# APPENDIX C

( Clause 3.6.4 )

# NO OBJECTION CERTIFICATE

In exercise of the powers conferred by Rule
son of resident of
* *
locating a permanent/semi-permanent cinema on the land belonging to Shri at
***************************************
The site where the cinema is to be located is specified below:  ( Please give here the description of the site )
This 'No Objection Certificate' is valid for a period of two years in the case of permanent cinema, and six months in the case of touring cinema from the date hereof and if within this period the proposed cinema is not put up, a fresh no objection certificate should be applied for.
Given under my hand this day of
Licensing Authority

<sup>\*</sup>Full address.

<sup>†</sup>Full description of location of site.

# APPENDIX D

(Clauses 3.7.1 and 3.7.2.5)

# APPLICATION FOR CINEMA BUILDING PERMIT/LICENCE

То	
	The Licensing Authority/Local Body Authority
	***************************************
	***************************************
Sir,	
a lice given BAZ forwa in qu	I hereby apply to you, pursuant to Rule
	<ol> <li>Site Plan</li> <li>Building Plan</li> <li>Services Plan</li> <li>Specifications, General and Detailed*</li> <li>Ownership Title</li> <li>Attested Copy of Receipt for Payment of Fees</li> </ol>
ded 1	I request that the proposal may be approved and permission accor- to me to execute the work.
	Signature of owner  Name of owner  ( in block letters )  Address of owner
	***************************************
	***************************************
Date	******

<sup>\*</sup>A format may be prepared by the Authority for direct use.

# APPENDIX E

( Clause 3.7.2.6 )

# FORM FOR SUPERVISION

To
The Licensing Authority/Local Body Authority
••• ••• ••• ••• ••• ••• ••• ••• ••• ••• •••
104 144 105 000 000 140 144 000 100 100 100 100 100
Sir,
I hereby certify that the erection/material alteration in/of cinema building situated on/in plot No
Signature of Licensed Architect/Engineer
Name of Licensed Architect/Engineer
Licence No. of Architect/Engineer
Address of Architect/Engineer
***************************************
Date

#### APPENDIX F

(Clauses 3.7.2.6 and 3.7.10)

# GUIDE FOR THE QUALIFICATIONS OF LICENSED ARCHITECTS AND ENGINEERS

# F-1. ESSENTIAL REQUIREMENTS

F-1.1 Every building work for which permission is sought under the building byelaws shall be designed and supervised by a licensed architect/engineer. Qualifications which an architect or engineer should have before he may be registered by the local body and permitted to practise within the local body's jurisdication are given in F-2.1 to F-2.2.

# F-2. QUALIFICATIONS FOR ARCHITECTS AND ENGINEERS

- F-2.1 The minimum qualifications for licensing of architect shall be the Associate Membership of the Indian Institute of Architects or such degree or diploma which makes him eligible for such membership or such qualifications listed in the Architects Act 1972, and shall be registered with the Council of Architecture under the Act.
- F-2.2 The minimum qualifications for licensing of engineer shall be the Corporate Member of Civil Engineering Division of the Institution of Engineers (India) or such degree or diploma in civil, structural engineering which makes him eligible for such membership.
- F-2.2.1 The work of structural designing of the building shall be carried out by a licensed engineer having minimum 3 years experience in structural engineering practice in designing. The 3 years experience shall be relaxed to 2 years in case of post graduate degree of recognized Indian or Foreign University in the branch of structural engineering. In case of doctorate in structural engineering, the experience required would be one year.

# APPENDIX G

(Clause 3.7.11)

# FORM FOR SANCTION OR REFUSAL OF BUILDING PERMIT

То

***************************************	
*** ***********************************	
Sir,	
With reference to your application	
dated for grant of	
situated on/in plot No i	in colony/Street
MOHALLA/BAZAR	
I have to inform you that the sanction ha Authority on the following grounds:	s been granted/refused by the
1.	
2.	
3.	
4.	
5.	
6.	
Office Stamp	Signature of the
	Authority
Office ( Communication ) No	Name, Designation and Address of the Authority
	******** **********************
	*** *** *** *** *** *** *** *** *** *** *** ***
Dated	*** *** *** *** *** *** *** *** *** *** *** ***
<b>70</b>	

# APPENDIX H

[ Clause 3.8.2 (d) ]

# FORM FOR NOTICE OF COMMENCEMENT

The Licensing Authority/Loc	cal body Authority
*** ***	••••
*******************	••••
I hereby certify that the ere	ction, material alteration in/of cinema
	in colony/BAZAR
will be commenced on	
	lance with plans, elevations and sections  dated
	Signature of owner
	Name of owner ( in block letters )
	Address of owner
	***************************************
Dota	

# APPENDIX J

[ Clause 3.8 2(e) ]

# FORM FOR COMPLETION CERTIFICATE

The Licensing Authority/Local body Authority
***************************************
**************************************
I hereby certify that the erection, re-erection or material alteration in/of cinema building No
Signature of Licensed Architect/Engineer
Name of Licensed Architect/Engineer
Licence No. of Architect/Engineer
Address of Architect/Engineer
** ***
Dated

# APPENDIX K

[ Clause 3.8.2(f) ]

# FORM FOR OCCUPANCY CERTIFICATE

***************************************
*** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
I hereby certify that the erection/material alteration in/of cinema
building situated on/in plot No
in colony/BAZARstreet/roadstreet/road
completed under the supervision of
licensed architect/engineer
licence No
that the building conforms in all respects to the requirements of byelaws for construction of cinema buildings, in respect of structural safety, fire safety, hygienic and sanitary conditions inside and in the surroundings and
is fit for occupation.
Office Stamp
Date Signature of the Authority

# APPENDIX L

( Clause 8.1 )

#### OFF-STREET PARKING SPACES

- L-1. Each off-street parking space provided for motor vehicles (cars) shall not be less than 13.75 m<sup>2</sup> in area, and for scooters and cycles, the parking spaces provided shall not be less than 1.25 m<sup>2</sup> and 1.00 m<sup>2</sup> respectively.
- **L-2.** The parking space in cinema buildings shall be provided as stipulated below:
  - a) Motor Vehicles Space shall be provided as given below for parking motor vehicles ( cars ):

Sl $N_0$ .	Cities/Towns	One Car Parking Space
		for Every
i)	With population between 200 000 to 1 000 000	25 seats
ii)	With population 50 000 to 200 000	80 seats
iii)	With population	120 seats

NOTE — The requirements for off-street parking for metropolitan cities with population 400 000 shall be broadly based on the above scale and these requirements shall be appropriately adapted to suit the increased traffic generated, the traffic pattern as well as the nature of vehicles in the city.

- b) Other Types of Vehicles In addition to the parking areas provided in (a) above, 25 to 50 percent additional parking space shall be provided for parking other types of vehicles and the additional spaces required for other vehicles shall be as decided by the Authority, keeping in view the nature of traffic generated in the city.
- **L-3.** One row of car parking may be provided in the front open space of 12 m without reducing the clear vehicular accessway to less than 6 m.
- L-4. Off-street parking space shall be provided with adequate vehicular acess to a street; and the area of drives, aisles and such other provisions required for adequate manoeuvering of vehicles shall be exclusive of the parking space stipulated in M-2.
- L-5. Parking spaces shall be paved and clearly marked for different types of vehicles.
- **L-6.** In the case of parking spaces provided in basements, at least two ramps of adequate width and slope shall be provided, located preferably at opposite ends.

(Continued from page 2)

Members

SHRI G. D. MATHUR

SHRI M. M. MISTRY

SHRI B. D. DHAWAN ( Alternate )

SHRI ANIL PANDIT

SHRI D. G. PANDYA

SHRI D. RAMANUJAM

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