

RURAL DEVELOPMENT AND LOCAL ADMINISTRATION DEPARTMENT

Multi-storeyed and Public Buildings Rules, 1973.
(G.O.Ms.No.1759, Rural Development and Local Administration, 24th August 1973).
S.R.O.No.A-914 of 1973.

In exercise of the powers conferred by section 191 and sub-section (1) of section 303 of the Tamil Nadu District Municipalities Act, 1920 (Tamil Nadu Act V of 1920), the Governor of Tamil Nadu hereby makes the following special rules.

RULES

1. Short title. (1) These rules may be called the multi-storeyed and Public Building Rules, 1973.

A. MULTI-STOREYED BUILDINGS

2. Definition.- In these rules, unless there is anything repugnant in the subject or context “Multi-storeyed Building” means and included all buildings with more than three storeyes or whose height is 15 metres or more.

AMENDED VIDE G.O.MS.NO.26 MA&WS DATED THE 25TH JULY 1984.

AMENDMENT

In the said Rules, in rule 2, for the words, “with more than three storeyes” the words “with more than four floors (including ground floor) shall be substituted.

Amendment published at page 412 of Part III section 1(9) of the T.N.G. Gazette dated 01.8.84.

3. Application of rules.- Every person intending to construct, reconstruct, add to or alter any multi-storeyed building in addition to the general requirements laid down in the rules, shall also comply with the following special rules.

4. Area for the constructions.- (a) Any construction, re-construction, alteration or addition or for a multi-storeyed building, shall be permitted only within the area approved for the construction of multi-storeyed buildings in a Town Planning Scheme made under the Tamil Nadu Town Planning Act, 1920 or in a Development Plan under the Tamil Nadu Town and Country Planning Act, 1971, or declared by a Special Resolution by the Council with the approval of Director of Town Planning for such purpose and shall not exceed the maximum number of storeyes or maximum height prescribed for the individual area.

(b) The minimum extent of site for construction of a multi-storeyed buildings shall be not less than 4 grounds in extent and should have the shortest side not less than

24.50 metres (80 feet) and shall abut on a street not less than 12.25 metres (40 feet) in width.

(c) In so far as the determination of sufficiency of all aspects of structural design, building services, plumbing, fire protection, construction practices and safety, the specifications, standards and codes of practice recommended in the National Building Code of India, 1970 shall be fully conformed to, besides those prescribed in these rules and any breach thereof shall be deemed to be a breach of requirements under these rules.

5. Engineer's approval.- The Engineer shall while according his approval or permission follow the code of practice and standard requirements recommended in the National Building Code of India, 1970.

6. Site plan, streets and spaces.- The site plan to be submitted in triplicate under the rules, shall also show the following:-

(a) The existing and proposed buildings in relation to the boundaries of the site and in relation also to all adjacent streets, buildings (with number of storeys and height) and premises within a distance of 15 metres (50 feet) of the site.

(b) The means of access from the street or streets to all the buildings existing and proposed in the site, to the parking spaces and facilities provided in the site within or outside the building and for scavenging and fire protection;

(c) The spaces to be left about the building for circulation, air light, access, parking and amenity; and

(d) The general layout of the columns and load bearing walls showing the estimated loads, including moments and torques coming on the foundation units.

7. Building plans.- The building plans to be submitted in triplicate under the rules shall also show:-

(a) Floor plans or all floors and covered area, indicating clearly the size and spacing of all framing members and sizes and arrangement of rooms and the position of staircases, ramps and lift walls;

(b) Longitudinal and cross sections of the building to show size of footings, basement and superstructure, framing members and details of building and room heights and of staircase, etc:

(c) In the case of constructions using steel structure complete design drawings, showing sizes, sections and relative location of the various steel members, floor levels, column centers and off-sets;

(d) In the case of prefabricated buildings, drawings describing the elements of the structure or assembly including all required data of physical properties of component, materials with details of joints to an enlarged scale, site or shop location of services such as installation of piping, wiring or other accessories and location of handling arrangements for lifting and handling the prefabricated elements; and

(e) Plans and sectional details of water-supply and sewage system for the building.

8. Specifications.- The following detailed specifications shall be furnished with the application for permission under these rules.-

(a) General and detailed specifications, giving type and grade of materials to be used;

(b) Detailed computations, stress diagrams to show the sufficiency and correctness of the design; and

(c) Type and condition of soil or rock to which the foundation transfers the loads.

8. Floor Area Ratio and Maximum Plot Coverage.- The Maximum Floor area ratio and maximum permissible plot coverage for different occupancies shall be as in the following table:-

THE TABLE

Floor Area Ratios. Floor Area Ratio and Maximum Plot Coverage for different Building Types.

Building type	Floor Area Ratio	Plot Coverage
(1)	(2)	(3)
1. Residential	150	35
2. Commercial		
(a) George Town and other special areas declared by council with the approval of Director of Town Planning	250	50
(b) Other areas of the City	160	40
3. Public and industrial	150	50
(a) George town and other special areas declared by council		
(b) Other areas of the city	100	50

Explanation (1) – The Floor Area Ratio specified in the table may be increased by 20 percent for the following services:-

(a) A basement or cellar and space under a building constructed on stilts and used as parking space, store room and air-conditioning plant room used as necessary to the principal use;

(b) Electric cabin or sub-station, watchman's booth, pump house and garbage shaft' and

(c) Staircase room and lift rooms above the topmost storey, architectural features, chimneys and elevated tanks.

Explanation (2).—The maximum plot coverage specified in the table includes 5 percent for covered parking and another 5 per cent may be allowed for covered garages for car and cycle parking. This area for parking in ground floor will not be taken into consideration for calculating Floor Area Ratio, but the space above it in first and upper floors will be counted.

10. Structural sufficiency.—(1) Foundations.—(a) Every wall, column, post and beam of a building shall be supported adequately by foundations of concrete or reinforced concrete piles, piers, caissons or other foundations of such thickness and projection as will be necessary to safety, sustain and transmit all the dead and superimposed load without exceeding the limitations of permissible stresses provided in these rules.

(b) All foundations, apart from those resting on bedrock, shall be carried down below the level of possible damage by frost or seasonal changes on soils possessing shrinking and swelling characteristics, such as clayey soils.

(c) The structural design of the foundations shall be determined as per the recommendation in the National Building Code of India, 1970, to ensure sufficiency and safety of the structures and to keep the stresses of the foundation materials and supporting soils within permissible limits prescribed in these rules.

(d) Piles either friction piles or end bearing piles may be used for the foundation of a building when soil conditions are suitable and their design, use and spacing shall conform to the recommendations in Part VI – Section 2 of the National Building Code.

(e) All piles used to support any structure or part thereof shall be driven, jetted or otherwise embedded to such depth as is necessary to secure adequate soil or rock bearing capacity and in such a manner as not to impair their strength and shall be of sufficient strength to withstand also all stresses resulting from handling and driving.

(2) Walls and Columns.- (a) The thickness of every load bearing non-reinforced masonry wall shall be sufficient at all points to ensure that the stresses due to the worst conditions of loading for which the structure is designed are within the limits prescribed.

(b) Maximum slenderness ratio:

Walls.- For a wall, the slenderness ratio shall be the effective height divided by the effective thickness or the effective length divided by the effective thickness whichever is less.

Columns.- For a column, the slenderness ratio shall be the effective height divided by the corresponding lateral dimension (thickness or width).

(i) in the case of load bearing walls set in cement mortar (1:6) or cement lime mortar (1:2:9), the slenderness ratio shall not exceed 18 and for those set in lime mortar, it shall not exceed 12.

(ii) In the case of non-load bearing walls, the slenderness ratio shall not exceed 30 for panel walls and curtain walls and shall not exceed 24 for force standing walls and parapet walls.

(ii) The slenderness ratio for load bearing column shall not exceed 12.

(c) Where a solid wall or masonry is load bearing, its thickness shall not be less than that determined by the calculated masonry method through the monograms of the National Building Code of India, 1970, unless otherwise determined through the structural analysis of the building on accepted principles of mechanics to sustain the most adverse combination of loads to which the building shall be subject to during or after erection.

(d) the design loads and other forces to be taken for the design of masonry structure shall conform to those laid down in Part VI- Section 1 of the National Building Code of India, 1970, briefly extracted in Appendix L to these Rules.

(e) Where a wall is subdivided into panels by adequate horizontal or vertical supports or both the individual panels shall be designed for structural sufficiency.

(f) Where reinforced concrete walls are intended to carry vertical loads, they should be designed generally in accordance with the design criteria for columns. The cross sectional area of vertical reinforcement and the lateral reinforcement parallel to the wall face may be reduced to not less than 0.2 per cent.

(g) The thickness of a reinforced concrete wall should not be less than 10 cm.

(3) Concrete and steel structures.- The design and structural use of plain, reinforced and pre-stressed concrete for buildings and the component parts shall conform to the recommendations of the National Building Code of India in its Part VI-Section 5 and the use of structural steel in general building construction shall conform to the stipulations in section 6 of Part VI of the said National Building Code.

(4) Prefabricated Building.- The modular planning component sizes, joints, manufacture, storage, transport and erection of prefabricated elements for use in the building shall conform to the recommendations in Section 7-Part VI of the National Building Code of India, 1970.

(5) Excavations.- (a) All excavations shall be protected and properly guarded in such a manner as to prevent danger to life or property; where necessary, excavations shall be sheet-piled to prevent the earth, soil or surface of any street or adjoining property from caving in or being damaged thereby.

(b) No excavation for any purpose shall extend within 30 cm. of the angle of repose or natural slope of the soil under any footing or foundation unless such footing or foundation is properly under-pinned or protected against settlement.

(c) Where an excavation is back filled, measures shall be taken to place the back fill so as to-

- (i) maintain the lateral support of the soil exposed by the excavation;
- (ii) have a bearing capacity adequate to support the anticipated surcharge;

and

- (iii) prevent detrimental settlement.

11. Open spaces. (1) Open spaces around and about the Building:

(a) There shall be a permanent open air space, forming an integral part of the site and of a minimum extent specified in this Rule, between each of the boundaries of the site and every building proposed within the site.

(b) The extent of the open spaces (specified in the above sub-rule) which shall be co-extensive with the site boundaries shall be as follows:-

Building type (1)	Minimum open yard form the site boundaries (2)
(i) Building upto a height of 10 metres	Three metres.
(ii) Building of height above 10 metres upto 30 metres	Three metres plus 1 metre for every additional 3 metres or fraction thereof over 10 metres.
(iii) Building of height over 30 metres	10 metres plus 1 metre for every additional 5 metres or fraction thereof, subject to a maximum of 16 metres.

(c) The space specified above shall be kept open to the sky and free from any erection of any building other than a fence or compound wall provided however that parking garages not exceeding 3 metres in height and subject to compliance with the stipulations of F.A.R. and access ways may be permitted in the open yards on the sides opposite the side of the site abutting on the street or in the case of sites abutting more than

one street on the wider of the streets and provided also that these open yards may be used for the provision of open access ways to the building and parking facilities.

(2) Open spaces for amenity.- Where the building proposed is a residential building for accommodating multi-family dwelling there shall be also provided in the site a common amenity open space. The extent of this additional open space shall be 10 per cent of the site area.

12. Means of access and circulation. – (a) These shall be provided from the street to the entrance door or doors of every building in the site a clear way of not less than 5 metres in width as a means of access to such buildings which shall be maintained free from any obstruction or any overhang or projection from the building.

(b) The space so set apart as means of access shall be separately distinguished from any house gully or open space for amenity requirements prescribed under the Rules.

(c) Every such means of access shall be made, drained and lighted to the satisfaction of the Engineer and manhole covers or other drainage, water or any other fittings laid in such means of access shall be flush with the finished surface level so as not to obstruct safe travel over the same.

(d) Any person who undertakes construction work on building shall not reduce the access to any building previously existing below the minimum width prescribed under these Rules.

(2) Exits and means of egress.- (a) Every building meant for human occupation shall be provided with exits sufficient to permit safe escape of occupants in case of fire or other emergency.

(b) An exit may be a doorway, corridor, passageways to an internal staircase or external staircase or to a verandah or roofs or terraces having access to the street.

(c) Exits shall be so arranged as to provide continuous means of egress to the exterior of a building or an exterior open space leading to a street, without passing through any occupied unit.

(d) Exits shall be so located that the travel distance on the floor shall not exceed 22.5 metres in the case of residential, and public buildings and 30 metres in the case of commercial, industrial and other buildings. There shall be atleast two exits serving every floor and atleast one of them shall be a stairway.

NOTE:- Travel distance means the distance from any point in the floor area to any exist measured along the path of aggress travel except that when floor areas are sub-divided into rooms used singly or suites of rooms and served by corridors or passages, the travel distance may be measured from the corridor entrance of such rooms or suites to the nearest exit.

(e) Width of any exit shall not be less than 100 cm. and shall be determined for the total number of occupants as specified in the following table. The unit of exit width for measuring the capacity of exits shall be 50cm. A clear width of 25cm. shall be counted at an additional half unit and clear width less than 25cm. shall not be counted for exit widths:-

Serial Number	Occupancy	Number of occupants	
		Stairways	Doors
(1)	(2)	(3)	(4)
1.	Residential	25	75
2.	Business	50	75
3.	Educational	25	75
4.	Other Public buildings	60	50
5.	Industrial	50	75

13. Parking and parking facilities.- (1) (a) For the use of the occupants and of persons visiting the premises for the purposes of profession, trade, business recreation or any other work parking space and parking facilities shall be provided within the site, to the satisfaction of the Commissioner and conforming to the standards specified in Appendix E to these Rules; and

(b) Necessary provision shall be also made for the circulation of vehicles gaining access to and from (i) the parking spaces and facilities and (ii) the premises, into the street.

(2) The parking spaces and facilities provided under this Rule shall be maintained as such to the satisfaction of the Engineer and conforming to any by-law that may be made by the Corporation in that regard.

14. Fire safety (1) All buildings in their design and construction shall be such as to contribute to and ensure individually and collectively the safety of life from fire, smoke, fumes and panic arising from these or similar other causes.

(2) Fire detecting and extinguishing system.- In buildings of such size, arrangement or occupancy that a fire may not itself provide adequate warning to occupants automatic fire detecting and alarm facilities shall be provided where necessary to warn occupants of the existence of fire, so that they may escape, or the facilitate the orderly conduct of fire exit drills.

(3) Fire protecting and extinguishing system shall conform to accepted standards and shall be installed in accordance with good practice as recommended by in the National Building Code of India, 1970 and to the satisfaction of the Directorate of Fire Services.

15. Architectural control.- (1) The design and plans of the building shall be made and countersigned by a qualified architect who is an Associate of the Indian Institute of Architects;

(2) The design and plan shall be scrutinised and approved by a panel comprising of the following members:-

(i) Engineer;

(ii) a Town Planner of Government; and

(iii) a prominent private architect, provided that the Architect member of the panel shall not have made the plans and designs for the building under consideration.

(3) Any suggestion or alteration suggested by the panel shall be incorporated in the plans and shall be conformed to.

B. PUBLIC BUILDINGS.

16. Sufficient exits. – Every person intending to construct, reconstruct add to or alter any public building shall in addition to the general requirements laid down in the rules, also comply with rules, 9,11 (a), (b), (c) , 12 and 13 prescribed for multi-storeyed buildings and also with the following rules:-

(2)(a) Every place of assembly, every tier or balcony and every individual room used as a place of assembly in a public building shall have exits sufficient to provide for the total capacity thereof leading directly outside the building or to stairways and ramps or both.

(b) There shall be atleast two separate exits as remote from each other as practicable for each room, hall or place of assembly, with a capacity of 600 persons atleast three separate exits when the capacity is between 601 to 1,000 atleast four separate exits when the capacity is over 1,000:

Provided that when the capacity is less than 100 persons, and no part of the room or hall or place of assembly is 15 metres from the doorway in the line of travel, a single doorway of 100cm. may be permitted.

17. Aisles and spacing rows of seats.- (1) Clear aisles not less than 1.2 metres in width shall be provided at right angles to the line of seating in such number and manner that no seat shall be more than 3.8 metres away from an aisle measured in the line of seating.

(b) Where all the aisles do not directly meet the exit doors, cross aisles of minimum 1 metre width and at the rate of one cross aisle for every 10 rows of seats shall be provided parallel to the line of seating so as to provide direct access to the exit.

(c) Rows of seats between aisles shall not have more than 14 seats and in the case of such rows opening to an aisle at one end, shall not have more than 7 seats.

(d) There shall be a minimum space of 85 cm. between the backs of any two rows of seats and a minimum of 35 cm. between the back of any seat and the front of the seat immediately behind it as measured between plumb lines.

18. Fire detecting and extinguishing systems. Every public building having a capacity of 1,000 persons or more, shall be provided with either a manually operated fire alarm system coded to alert employers or attendants or with an automatic fire detections system to conform to the standards and recommendations laid down in the National Building Code of India, 1970 and to the satisfaction of the Directorate of Fire Services.

APPENDIX E

Serial number	Land and building use	Area of parking spaces unit (in square metres)	Number of units of parking spaces to be provided
(1)	(2)	(3)	(4)
1.	Residential: (a) Single Family House..	17.5	One for every site with an area of 350 square metres and over
	(b) Apartment flats	17.5	One for every two families
2.	Commercial: (a) Shops..	17.5	One for the first 200 square metres of floor area and one additional unit for every 100 square metres or part thereof every 200 square metres
	(b) Shopping centres	20	One for every 250 square metres of site area or part thereof
	(c) Offices and firms	20	(i) For building with floor area less than 200 square metres – Nil
			(ii) For building with floor area over 200 square metres, one for every 200 square metres or part thereof upto 1,000 square metres and one additional unit for every 100 square metres of floor area over 1,000 square metres.
	(d) Restaurants..	17.5	(i) Restaurants with less than 50 seats – Nil
			(ii) With 50 seats and over one unit for every 20 seats or parts of 20 seats.
(e) Hotels and lodges	17.5	One for every 6 beds.	
(f) Cinemas and public halls including Community hall	17.5	One for every 25 seats	

	(g) Kalyanamandapam etc.	17.5	One for every 200 square metres of site area.
3.	Warehousing and wholesale stores	40	One for every 500 square metres of floor area or part thereof
4.	Public and semi-public offices	20	(i) For building with floor area less than 100 square metres – Nil
			(ii) Floor area of 100 square metres and above; one for every 200 square metres or part thereof.
5.	Hospital and nursing homes	17.5	One for every 15 beds.
6.	Industries	30	(i) Upto 100 square metres of floor area – Nil
			(ii) With floor area over 100 square metres one for every 200 square metres
7.	For other uses, Institutions and Transport and Communication centres		Requirements to be assessed by Commissioner in consultation with Commissioner of Police and Director of Town Planning

APPENDIX L

Design loads and other forces for design of masonry structures.
(See Special Rule 10(2)(d) of Multi-storeyed Buildings)

I. Dead loads.- The dead load in a building shall comprise the weight of all walls, partitions floors and roofs and shall include the weights of all other permanent constructions in the building. The dead load is determined adopting the dead weight of the construction materials and given in the following Table:-

(a) Description of construction materials.		Weight in Kg./M ³
(1)	Brick, in mud lime or cement mortar	1920
(2)	Coarsed rubble in lime or cement mortar	2,240
(3)	Literate in lime mortar	2,000
(4)	Concrete in lime or cement mortar	(a) 19.20 (brick jelly) (b) 2,240 (hard broken stone)
(5)	Random rubble in lime or cement mortar	2,240
(6)	Lime stone	2,400 to 2,640
(7)	Sand-stone	2,240 to 2,400
(8)	Cuddapah slabs	2,720
(9)	Ashlar	2,720
(10)	Granite stone	2,640 to 2,800
(11)	Reinforced concrete	2,400
(12)	Cast iron	7,030 to 7,130

(13)	Wrought iron	7,700
(14)	Steel	7,850
(15)	Teak	625
(16)	Pine	610
(17)	Oak	865
(18)	Fir	430 to 460
(b) Description of roof material and roofs-		
		Weight in Kg/M ²
(1)	Corrugated iron sheet (1.25mm)	10.56
(2)	Corrugated iron sheet (1.0mm)	8.60
(3)	Brick, in mud, lime or cement mortar	1,920
(4)	Coarsed rubble in lime of cement mortar	2,240
(5)	Laterite in lime mortar	2,000
(6)	Concrete in lime or cement mortar	(a) 19.20 (brick jelly)
	Concrete in lime or cement mortar	(b)2240 (hard broken stone)
(7)	Random rubble in lime or cement mortar	2,240
(8)	Lime-stone	2,400 to 2,640
(9)	Sand-stone	2,240 to 2,400

2. Live loads.- (a) Live loads on floors. (1) Live loads on floors shall comprise all loads other than dead loads. The minimum live loads on different floors for different uses are specified in the following table in terms of uniformly distributed static loads.

(ii) In designing the walls, columns, piers, their supports and foundations he following reduction in assumed total live roads on floors may be made:

Number of floods carried by member under consideration	Percent reduction of total live load on all floor above the member under consideration
1	0
2	10
3	20
4	30
5 or more	40

(iii) No reduction shall be made in the case of warehouses, garages and other buildings used for storage purposes and for factories and workshops designed for 500kg./M².

THE TABLE
Live loads on floors

Type of floors	Minimum live loads per Kg/m ⁵ of floor area	Alternate minimum live load
(1)	(2)	(3)
Floors in dwelling houses, tenements hospital wards, bed rooms and private sitting rooms in hostels and dormitories	200	---
Office floors other than entrance halls, floors of light work rooms	*250-400	---
Floors of banking halls, office entrance halls and reading rooms	300	---
Shop floors used for the display and sale of merchandise; floors of work-rooms generally floors of class-rooms in school floors or places of assembly with fixed seating, restaurants, circulation space in machinery halls power stations, etc., where not occupied by plant or equivalent	400	Subject to a minimum total load of 2.5 times the values in column 4 for any given slab panel and 6 times the values in column 4 for any given beam
Floors of warehouses, workshops factories and other buildings or parts of buildings of similar category for light weight loads; office floors for storage and filing purposes; floors of places of assembly with-out fixed seating, public rooms in hotels, dance halls, waiting halls, etc.	500	This total load shall be assumed uniformly distributed on the entire area of the slab panel or the entire length of the beam
Floors of warehouses, workshops, factories and other buildings or parts of buildings of similar category for medium-weight loads	750	---

*The lower value of 250 kg/m² should be taken where separate storage facilities are provided and the higher value of 400 Kg/m² should be taken where such provisions are lacking.

Floors of warehouses, workshops, factories and other buildings or parts of buildings of similar category for heavy-weight loads, floors of book stores and libraries, roofs and pavement lights over basements projecting under the public foot-path	1000	---
Floors used for garages for vehicles not exceeding 2.5 tonnes gross weight:		
Slabs	400	The worst combination of actual

		wheel loads, whichever is greater.
Beams	250	The worst combination of actual wheel loads, subject to a minimum of whichever is greater.
Floors used for garages for vehicles not exceeding 4 tonnes gross weights	750	Subject to a minimum of one and a half times maximum wheel load but not less than 900 kg. considered to be distributed over 5 cm. square.
Stairs, landings and corridors for class 200 loading but not liable to over-crowding.	300	Subject to a minimum of 130 kg.
Stairs, landings and corridors for class 200 loading but not liable to over-crowding and for all other classes	500	concentrated load at the unsupported end of each step for stairs constructed out of structurally independent cantilever steps
Balconies not liable to over crowding:		
For class 200 loading	300	---
For all other classes	500	---
Balconies liable to over-crowding:	500	

Explanation 1.- A reference to a 'floor' includes a reference to any part of that floor, and a reference to 'slabs' includes boarding and beams or ribs spaced not further apart than one metre between centres, and a reference to 'beams' means all other beams and ribs.

Explanation 2.- Under loading class No.250, the reference to 'light workrooms' envisages rooms in which some light machines (for example, sewing machines used by milliners or tailors) are operated without a central power –driven unit that is the machines are independently operated, either by hand or by small motors, Under loading class No.400, the reference to 'work rooms' generally envisages the installation of machines operated with a central power-driven unit, with the individual machines being belt driven.

Explanation 3. – 'Fixed seating' implies that the removal of the seating and the use of the space for other purposes is improbable. The maximum likely load in this case is, therefore, closely controlled.

Explanation 4.- The loading in workshops, ware houses and factories varies considerably and so three loadings under the terms 'light' medium' and 'heavy' are introduced in order

to allow for more economical designs but the terms have no special meaning in themselves other than the live load for which the relevant floor is designed. It is however, important particularly in the case of heavy weight loads, to assess the actual loads to ensure that they are not in excess of 1,000 kg/m² in cases where they are in excess, the design shall be based on the actual loading.

Explanation 5.- The load classification for stairs, corridors, balconies and landings provide for the fact that these often serve several occupancies and are used for transporting the furniture and goods.

(b) Live loads on roofs.- Allowance for live load on flat roofs, sloping roofs and curved roofs shall be as given in the following Table.

THE TABLE
Live loads on floors

Type of roof	Live load measured on plan	Minimum live load measured on plan
(1)	(2)	(3)
Flat, sloping or curved roof with slopes upto and including 10 degrees		
(a) Access provided	150 kg/m ²	375 kg. uniformly distributed over any span of one metre width of the roof slab and 900 kg. uniformly distributed over the span in the case of all beams.
(b) Access not provided, except for maintenance	75 kg/m ²	190 kg. uniformly distributed over any span of one metre width of the roof slab and 450 kg. uniformly distributed over the span in the case of beams.
Sloping roof with slop greater than 10 degrees	(a) For roof membrane sheets or purlines - 75 kg/m less 2 kg/m for every degree increase in slope over 10 degrees	Subject to a minimum of 40 kg/m ²
	(b) For membrane supporting the roof membrane and roof purlines, such as trusses, beams girders, etc. – 2/3 of load in (a).	
	(c) Loads in (a) and (b) do not include loads due to snow, rain, dust collection, etc., and the effects of such loads shall be appropriately considered.	

Curved roofs with slope at springing greater than 10 degrees	(75-345 r) kg/m - where $r=h/l$	Subject to a minimum of 40kg/m ² .
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h = the height of the highest point of the structure measured from its springing; and
 l = chord width of the roof singly curved and shorter of the two sides, if doubly curved.

Note.- For special types of roofs with highly permeable and absorbent material, the contingency of roof material increasing in weight due to absorption of moisture shall be provided for.

(c) Impact and vibrations.- For structures carrying live loads which induce impact or vibrations, the live load shall be increased as follows:-

- (i) For frame supporting lifts and hoists – 100 per cent.
- (ii) For foundations, footings and piers supporting lifts and hoisting apparatus – 40 per cent.
- (iii) For light machinery, shaft or motor units – 20 percent minimum.
- (iv) For reciprocating machinery or power units – 50 per cent minimum.
- (v)

3. Wind load. – The wind load on a building shall be calculated on the basis of the basic wind pressure, given in the following Table, which is the equivalent static pressure in the direction of flow of wind:

(a) Basic wind pressures for the city.

Height in metres	Pressures in kg./m ²
(1)	(2)
Upto 30	200
35	208
40	210
45	217
50	222
60	230
70	236
80	244
100	265
120	264
150	276

For intermediate heights, interpolated values may be adopted.

(b) Wind pressures on roofs.- For flat and pitched roofs the wind pressures and sections normal to the surface due to wind blowing at right angles to the ridge shall be determined by multiplying the basic wind pressure (p) with the factors given in the Table below:-

THE TABLE.
WIND PRESSURES ON ROOFS.
(Wind normal and ridge)

Slope of roof on	External	Wind pressure
(1)	(2)	(3)
Windward side	Windward slope	Leeward slope
0°	-1.00p	-0.50p
10°	-0.70p	-0.50p
20°	-0.40p	0.50p
30°	-0.10p	-0.50p
40°	+0.10p	-0.50p
50°	+0.30p	-0.50p
60°	+0.40p	-0.50p
70°	+0.50p	-0.50p
80°	+0.50p	-0.50p
90°	+0.50p	-0.50p

4. Seismic loads.- The seismic co-efficient, stress increase, design live loads as stipulated in the National Building Code of India, 1970 shall be taken into account while designing the structures.

sd/- C.G.RANGABASHYAM,
Secretary to Government.

/true copy/

DEFINITION OF PUBLIC BUILDING

(33) "Public building" means any building to which the public or any class or section of the public are granted access or any building which is open to the public or any class or section of the public and includes- any building-

(a) used as a –

(i) School or a college (whether or not the school or college is a private educational institution within the meaning of the Tamil Nadu Private Educational Institutions (Regulation) Act, 1966 (Tamil Nadu Act 23 of 1966), or a University or other educational institutions;

(ii) hostel;

(iii) library;

(iv) hospital, nursing home, dispensary, clinic, maternity centre or any other like institution;

(vi) club;

- (vii) lodging house;
- (viii) choultry;
- (ix) coffee house, boarding house or hotel or an eating house;

- (b) used by any association;
- (c) ordinarily used by the-

(i) Central or any state Government or any local authority or any body corporate, owned or controlled by the Central or any state Government;

(ii) public or any class or section of the public for religious worship or for religious congregation;

Source:-The Tamil Nadu Town and Country Planning Act, 1971.
Chapter 1 Section-2 Clause:33.

DEFINITION OF PUBLIC BUILDING

2(8) “Public building’ means any building to which the public or any class or section of the public are granted access or any building which is open to the public or any class or section of the public and includes-

- (a) any building used as a school (including a tutorial school) or a college (including a tutorial college) or a University or other educational institution;
- (b) any building used as a hostel;
- (c) any building used as a library;
- (d) any building used as a hospital, a nursing home, dispensary, clinic, maternity centre or other like institution;
- (e) any building ordinarily used for public meetings or for celebrating marriage functions or holding parties;
- (f) any building used as a club or by any association;
- (g) any building used as a lodging house;
- (h) any building used as a choultry;
- (i) any building used as an eating-house, a coffee house, boarding house or hotel; and
- (j) any building ordinarily used by the public or any class or section of the public for religious worship or for religious congregation.

Source: Madras Public Buildings (Licensing) Act, 1965.