



TAMIL NADU FIRE AND RESCUE SERVICES DEPARTMENT

From
Dr. C.K. Gandhi Rajan, I.P.S.,
DGP / Director,
Tamil Nadu Fire and Rescue Services,
No.17, Rukmani Lakshmipathi Salai,
Egmore,
Chennai - 600 008.

To
The Member Secretary,
Chennai Metropolitan Development
Authority,
No.1, Gandhi Irwin Road,
Egmore,
Chennai - 600 008.

R.Dis.No.1182/C1/2019

Dated.29.03.2019

PP.NOC.No.36/2019

Sir,

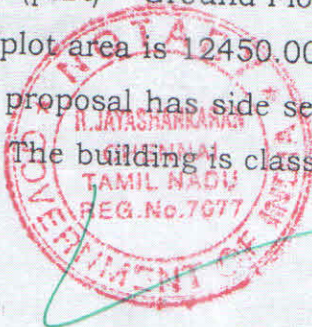
Sub: Tamil Nadu Fire and Rescue Services - Directorate -
High Rise Building - Issue of Planning Permission NOC
requested - Inspection at M/s. Sanjay Jayapal,
S.No.165/176A1, 176A2, 176A3, 176A4, 176A5, 176A6,
176A7 & 176A8 of Injambakkam Village, East Coast
Road, Vettuvankanni, Chennai - 600 115 - Reg.

Ref: 1) The applicant letter dated:22.01.2019.
2) The Joint Director, Northern Region, Report
Rc.No.260/C/2019, Dated:27.02.2019.

With reference to the letter cited above, the MSB Inspection committee of Northern Region has inspected the site of M/s. Sanjay Jayapal, S.No.165/176A1, 176A2, 176A3, 176A4, 176A5, 176A6, 176A7 & 176A8 of Injambakkam Village, East Coast Road, Vettuvankanni, Chennai - 600 115 for which PP NOC has been requested and the committee has made certain observations as regards Fire and Safety, which are reproduced below:-

Observation:-

It is a Planning Proposal for the construction of Assembly Building (9 Screen) consists of Stilt Floor (part) + Ground Floor (part) + 2 Floor with the height of 18.30 m. The total plot area is 12450.00 Sq.mtr and the total floor area is 6509.73 Sq.mtr. The proposal has side set back area of minimum 7 m at all around the building. The building is classified to come under Group

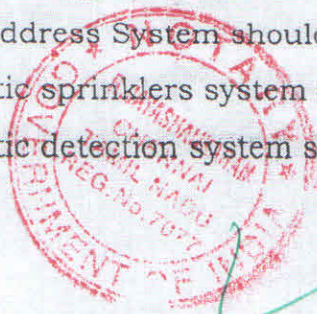


Sanjay Jayapal
SANJAY JAYAPAL

D - Assembly Building, Sub Division D-1 Building having a theatrical or motion picture or any other stage and fixed seats for area over 1000 persons as per classification of the National Building code of India part IV Fire and Life Safety - 2016.

The following Fire & Life Safety measures should be provided in the proposed building before the issue of compliance certificate as listed below:

1. There should be a Wet-riser per thousand square meters area covering all floor areas with landing valves along with delivery hoses. The raiser should be fully charged with adequate pressure at all times & should have both automatic and manual operation. To feed the wet-riser and sprinkler system an underground static water tank of minimum capacity 150000 liters should be provided with refilling facilities for per set of pumps. A terrace level tank of capacity 10000 liters also should be provided respective tower terrace. To charge the wet riser system and the sprinkler system one set of pumps shall be provided for each 100 hydrants or part thereof with a maximum of two sets. In case of more than one pump set installation, both pump sets shall be interconnected at their delivery headers. One set of pumps are contains an electrical pump of capacity 2280 LPM for hydrants, an electrical pump of capacity 2280 LPM for sprinkler system, an equal capacity of a Diesel Pump and an electrical pump of each capacity of 180 LPM as a Jockey pump should be provided near the underground water tank. The pumps should be capable of developing pressure of 3.5 kg/cm^2 at terrace level hydrant point.
2. Fire service inlets fitted with NRV at ground level should be provided.
3. Hose reel assembly should be covering each floor area.
4. Yard hydrant should be provided all around the building.
5. Manually operated electric fire alarm system also includes talk back system to be provided at all floors.
6. Public Address System should be provided connecting all the floors.
7. Automatic sprinklers system should be provided at all the floors.
8. Automatic detection system should be provided at all the floors.



SANJAY JAYAPAL

9. Lightning arrester should be provided.
10. Alternative & Independent power systems should be provided to Fire pumps, Emergency Lighting system and fire lift.
11. Fire escape staircase should be pressurized as per the clause 4.4.2.5 of the requirements of National Building Code of India.
12. Fire escape - Internal staircases and External staircase:

a) Internal staircases:

As per clause 4.4.2.4.3.2 of the National Building Code of India part IV Fire and Life safety 2016 - All staircases shall have minimum width for Assembly Building 2.00 meters. The minimum width of tread without nosing shall be 300 mm for Assembly Building and the tread shall be constructed and maintained in a manner to prevent slipping. The maximum height of riser shall be 150 mm for Assembly Building and the number shall be limited to 12 per flights.

b) Fire exit:

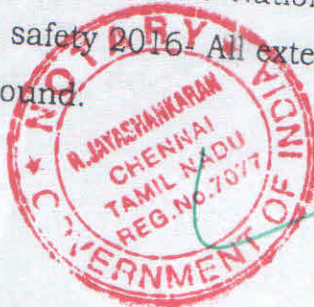
As per clause of the National Building Code of India part IV fire and life safety 2016 - Every exit, exit access or exit discharge shall be continuously maintained free of all obstructions or impediments to full use in the case of fire or other emergency.

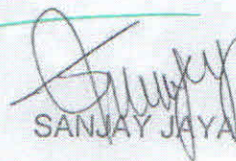
As per clause of the National Building Code of India part IV fire and life safety 2016- All exits shall provide continuous means of egress to the exterior of a building or to an exterior open space leading to a street.

As per clause of the National Building Code of India part IV fire and life safety 2016- Exits shall be so arranged that they may be reached without passing through another occupied unit.

c) External staircases:

As per clause 4.4.2.4.3.4 of the National Building Code of India part IV fire and life safety 2016- All external stairs shall be directly connected to the ground.




SANJAY JAYAPAL

As per clause of the National Building Code of India part IV fire and life safety 2016- Entrance to the external stairs shall be separate and remote from the internal staircase.

As per clause of the National Building Code of India part IV fire and life safety 2016- Care shall be taken to ensure that no wall opening or window opens on to or close to an external stairs.

As per clause of the National Building Code of India part IV fire and life safety 2016- The route to the external stairs shall be free of obstructions at all times.

As per clause of the National Building Code of India part IV fire and life safety 2016- The external stairs shall be constructed of non-combustible materials and any doorway leading to it shall have the required fire resistance.

As per clause of the National Building Code of India part IV fire and life safety 2016- No external staircase, used as a fire escape, shall be inclined at an angle greater than 45° from the horizontal.

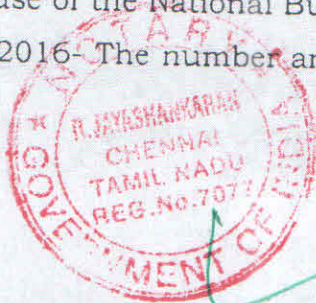
d) Fire lifts:

As per clause of the National Building Code of India part-8 fire and life safety 2016- Where applicable, fire lifts shall be provided with a minimum capacity for 8 passengers and fully automated with emergency switch on ground level. In general, buildings 15m in height or above shall be provided with fire lifts.

As per clause of the National Building Code of India part -8 fire and life safety 2016- In case of fire, only fireman shall operate the fire lifts. In normal course, it may be used by other persons.

As per clause of the National Building Code of India part -8 fire and life safety 2016- Each fire lift shall be equipped with suitable inter-communications equipment for communicating with the control room on the ground floor of the buildings.

As per clause of the National Building Code of India part-8 fire and life safety 2016- The number and location of fire lifts in a building



[Signature]
SANTHOSH JAYAPAL

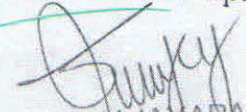
shall be decided after taking into consideration various factors like building population, floor area, compartmentation, etc.

13. The applicant should not provide any obstruction like transformer yard, generator, ramp to basement, swimming pool, Landscape, LPG bank etc., in the setback area, so as to facilitate the easy movement and operation of an aerial ladder platform vehicle during emergency. The setback area slop gradient should not be elevated from the ground level. The entry, movement and exit of the setback should have no slope and should be hard paved and support the operation of the Aerial Ladder Platform.
14. Any Ramp should not be exceed the building line and should not obstruct the side set back area at all around the building for the easy movement of an aerial ladder platform vehicle operation during emergency.
15. The First aid firefighting equipments should be provided at all floors in accordance with the IS 2190: 2010 requirements.
16. Life Safety

As per clause 6.4.2.2 of the National Building Code of India part IV fire and life safety 2016.

- a) Assembly occupancies of theatres, cinema halls and multiplexes shall be so located in the mall building that their exits will be separate and lead the occupant directly to exit discharge.
- b) The common path of travel shall be 30 m. The maximum dead end of corridor distance shall not exceed 6 m.
- c) The minimum width of an exit passageway shall be 2.0 m.
- d) Where wheeled carts or buggies are used by customers, adequate provision shall be made for the transit and parking of such carts to minimize the possibility that they might obstruct means of egress. Any the storage or hindrances causing obstruction exits shall be avoided.
- e) Car parking facilities shall comply with annex H. Car parking areas at upper levels adjacent to shops, food courts or multiplex




SANJAY JAYARAJ

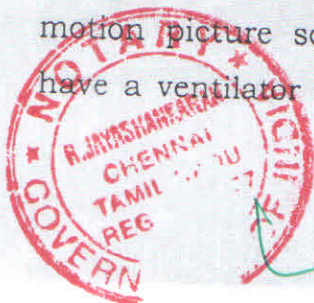
shall be separated by 120 min fire rated construction and building elements.

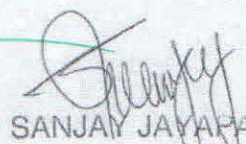
- f) 50 percent lifts in common areas in D - 6 shall be with features and requirements of fireman's lift.
- g) The manual call points shall be break glass and not pull stations.
- h) Photo luminescent markings shall be done along the width and length of treads in all enclosed exits staircases. Exit directional arrow on the wall (in the direction of egress) shall be 175 mm x 50 mm.
- i) Refuge area to be provided on the floor at or immediately above 18 m shall be not less than 10 percent of gross area of floor. Next refuge area to be at / on the floor immediately above 24 m. The refuge area shall be 10 percent of the respective floor, which may be divided into two or more separate refuge area at each of the respective floors, with each being not less than 100 m². Refuge area shall also meet all the requirements of life safety as per 4.

17. Fire Protection

As per clause 6.4.3 of the National Building Code of India part IV fire and life safety 2016.

- a) Every stage equipped with fly galleries, grid irons 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.
- b) The stage roof of every theatre using movable scenery or having a motion picture screen of highly combustible construction shall have a ventilator or ventilators in or above it, openable from the

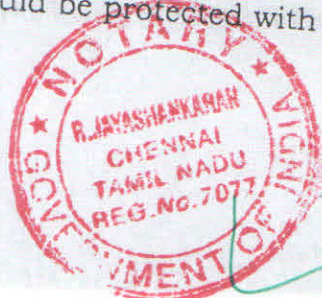


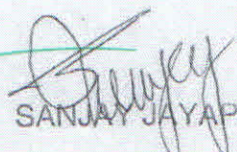

SANJAY JAYARAJ

stage floor by hand also opening by fusible links or some other approved automatic heat / smoke actuated device, to give a free opening equal to at least one-eighth the area of the floor of the stage.

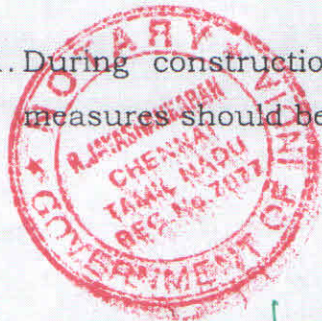
- c) The proscenium wall of every theatre using movable scenery of decoration shall have, exclusive of the proscenium opening, not more than two openings entering the stage, each not to exceed 2 m² and fitted with self-closing fire resistant doors.
- d) Every place of assembly in which projection of motion pictures by light is made shall have the projection apparatus enclosed in a fire resisting fixed booth in accordance with good practice [4(27)], except that such booth shall not be required where no nitrocellulose motion picture film is used.

- 18. Illuminated exit signage's should be provided with alternative source of power supply or battery back - up with "GLOW TYPE".
- 19. Service ducts and shafts: As per clause 3.4.5.4 of the National Building Code of India part IV fire and life safety 2016. Fire lift, Electrical Installation and Wiring, AC Duct & other Service Ducts should meet the requirements of NBC of India, Part 8, 2016.
- 20. The width and height of any arch or gate, if any, should have the clearance of not less than 4.5 m and 5 m respectively.
- 21. The compulsory open space as per DCR set back area all around the building should be designed to with stand a weight of 45 tons at any point of operation for the use of Hydraulic platform vehicle. In any case, no ramp, landscape garden and swimming pool shall be allowed in the setback area. The entire setback area earmarked shall be hard paved or provided with reinforced concrete so as to withstand the weight of the Aerial Ladder platform.
- 22. The Service ducts such as power cables, communication cables, A/C ducts etc. should be protected with proper fire sealing/fire dampers.




SANJAY JAYAPAL

23. The Cable gallery should be routed through fire resistant duct or fire protected tray. Suitable detectors shall be provided along the lines of the cable gallery.
24. Fire Resistant and Low Smoke Emission Cable should be used.
25. Assembly points should be designated at the ground floor as per the requirements of fire and life safety measures.
26. Dos and Don'ts laminated hanging pads should be available in all floors in Prominent places.
27. Evacuation route plan should be displayed in each floor at prominent places.
28. If the construction is done with prefabricated materials, sufficient natural vent / mechanized ventilation system should be provided.
29. A trained Fire Officer with a crew shall be arranged to maintain as well as to operate the fire protection systems in case of any need.
30. Glass of facade used in external walls shall comply with the following:
 - a. For fully sprinklered buildings having fire separation of 9 m or more, tempered glass in a non-combustible assembly with ability to hold the glass in place, shall be provided. It shall be ensured that sprinklers are located within 600 mm of the façade glass providing full coverage to the glass.
 - b. All gaps between floor slabs and façade assembly shall be sealed at all levels by approved fire resistance sealant material of equal fire rating as that of floor slab to prevent fire and smoke propagation from one floor to another.
 - c. Facade glass at each floor shall have means to open at least 10 percent of the total facade area to exhaust smoke during emergencies. Such openings, with sill level at 1.2 m, shall be in the form of openable panels of size not less than 1500 mm x 1000 mm opening outwards.
31. During construction of the building the following fire protection measures should be provided in good working condition:



SANJAY JAYAPAL

- 1) Dry riser minimum 100 mm diameter pipe with hydrant outlets on the floors constructed with a fire service inlet to boost the water in the riser from fire service pumps.
- 2) Drums filled with water of 2000 liters capacity with two fire buckets on each floor.
- 3) A water storage tank of minimum 20000 liters capacity, which may be used for other construction purposes also.

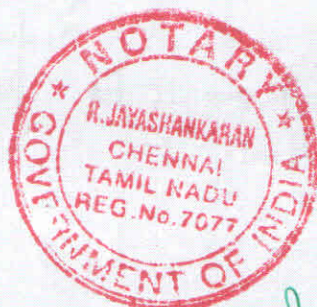
The MSB inspection team has recommended to issue Planning Permission No objection certificate to the proposed building subject to the fulfillment of the above conditions.

In view of the above PPNOC is issued on fire service point of view to accord planning permission to the above said proposed building subject to fulfillment of the above conditions, as recommended by the MSB committee. After completion of this project, Compliance Certificate should be obtained to ensure the Fire Safety Measures.

for Director,
Fire and Rescue Services,
Tamil Nadu.

Copy to: (1) M/s. Sanjay Jayapal,
78/132, Dr. Radhakrishnan, Salai,
Mylapore,
Chennai - 600 004.

(2) The Joint Director, Fire and Rescue Services,
Northern Region, Chennai. ✓




SANJAY JAYAPAL