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TAMIL NADU FIRE AND RESCUE SERVICES DEPARTMENT

From
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DGP / Director,
Tamil Nadu Fire and Rescue Services,
No.17, Rukmani Lakshmi pathi 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.2258/C1/2025

Dated.13.03.2025

PP NOC No.57/2025

Sir,

Sub : Tamil Nadu Fire and Rescue Services – Directorate – High Rise Building – Issue of Revised Planning Permission NOC requested – Inspection at M/s. Tamil Nadu Urban Habit Development Board, East Cemetery Road, S.No.1651/2pt, Block No.23, Tondiarpet Village, Fort Tondiarpet Taluk, Chennai - Reg.

Ref : 1) The applicant letter dated:20.02.2025.
2) The Joint Director, Northern Region, Report Rc.No.831/C/2025, Dated:11.03.2025.

Kindly refer to the letter cited above. The MSB inspection committee of the Northern Region has inspected the site of M/s. Tamil Nadu Urban Habit Development Board, East Cemetery Road, S.No.1651/2pt, Block No.23, Tondiarpet Village, Fort Tondiarpet Taluk, Chennai for which the revised PP NOC has been requested. The committee has made certain observations with regard to fire and life safety, which are reproduced below:-

Observation:

It is a revised planning proposal for the construction of residential building consisting of **5 blocks (A, B C, D& E). Block (A, B C, D & E)** consisting of partial stilt floor + 11 floors with the equal height of 35.70 meters up to terrace level. The proposal has side setback of 8 m at all

around the building. The plot area is 16916.97 sq. m and the total buildup area 43648.93 sq. m. The proposal occupancy is classified to come under Group A Residential Building, Sub-Division A-4 Apartment as per the 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 residential & club house building before the issue of fire license as listed below:

1. There should be a wet-riser along with hose reel assembly 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 75000 liters should be provided with refilling facilities. A terrace level tank of capacity 5000 liters also should be provided in respective towers. One set of pump contains an electrical pump of capacity 2280 LPM and equal capacity of one Diesel Pump and one electrical pump of 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. Manually operated electric fire alarm system including talk back system to be provided at all floors.
4. The first aid firefighting equipment's should be provided at all floors in accordance with the IS 2190: 2010 requirements.
5. Automatic sprinkler system should be provided at stilt floor if used for parking.
6. Public address system should be provided connecting all the floors
7. Lightning arrester should be provided.

8. Alternative & independent power systems should be provided to fire pumps, emergency lighting system and fire lift.
9. Number of Ramp, exit, location and its width should be conforms to the requirements of NBC of India, Part 4, Second Revision 2016.
10. Fire exit - internal staircases and external staircase:

Two staircases are provided at each block. All the staircases are internal staircases with external wall and are naturally ventilated.

As per clause 4.4.2.4.3.2 of the National Building Code of India part IV Fire and Life safety 2016 – The staircases shall have minimum width of 1.25 meters without railing. The minimum width of tread without nosing shall be 250 mm for residential 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 Residential Building and the number shall be limited to 12 per flights.

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.

All exits shall provide continuous means of egress to the exterior of a building or to an exterior open space leading to a street.

Exits shall be so arranged that they may be reached without passing through another occupied unit.

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,

Entrance to the external stairs shall be separate and remote form the internal staircase.

Care shall be taken to ensure that no wall opening or window opens on to or close to an external stairs.

The route to the external stairs shall be free of obstructions at all times.

The external stairs shall be constructed of non-combustible materials and any doorway leading to it shall have the required fire resistance.

No external staircase, used as a fire escape, shall be inclined at an angle greater than 45 degrees from the horizontal.

❖ **Fire lifts: As per clause 4.4.2.4.3 (h) (6) of NBC 2016. A staircase shall not be arranged round a lift shaft. Lift shall not open in staircases at the Block C.**

At least one lift should be designated as fire lift. 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.

In case of fire, only fireman shall operate the fire lifts. In normal course, it may be used by other persons.

Each fire lift shall be equipped with suitable inter-communications equipment for communicating with the control room on the ground floor of the buildings.

The number and location of fire lifts in a building shall be decided after taking into consideration various factors like building population, floor area, compartmentation, etc.,

11. **The applicant should not provide any obstruction like transformer yard, generator, 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 should not have any slope / gradient and not be elevated from the ground level.

12. Fire Fighting pump house

As per clause 5.1.2.2 of the National Building Code of India part IV fire and life safety 2016

- a) The pump house should be provided at the ground level.
- b) Pump house shall be separated by fire walls all around and doors shall be protected by fire doors (120 min rating).
- c) Pump house shall be well ventilated and due care shall be taken to avoid water stagnation.
- d) No other utility equipment shall be installed inside the fire pump room.
- e) Insertions like flexible couplings, bellows, etc., in the suction and delivery piping shall be suitably planned and installed.
- f) Installation of negative suction arrangement and submersible pumps shall not be allowed.
- g) Pump house shall be sufficiently large to accommodate all pumps and their accessories like PRVs, installation control valves, valves, diesel tank and electrical panel.
- h) Battery of diesel engine operated fire pump shall have separate charger from emergency power supply circuit.
- i) Exhaust pipe of diesel engine shall be insulated as per best engineering practice and taken to a safe location at ground level, considering the back pressure.
- j) Fire pumps shall be provided with soft starter or variable frequency drive starter.

13. 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.

14. Fire lift, electrical installation and wiring, AC duct & other service ducts should meet the requirements of NBC of India, Part 8, 2016.

15. The width and height of any arch or gate, if any, should have the clearance of not less than 7 m respectively.
16. The compulsory open space as per DCR set back area all around the building should be designed to with stand a weight of 64 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.
17. The service ducts such as power cables, communication cables, A/C ducts etc., should be protected with proper fire sealing/fire dampers.
18. 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.
19. As per section 3.2 of BIS 12459, 1988 – code of practice for fire safety in cable regularization, 1m transparent fire retardant coatings shall be applied to all cables at termination points in electrical panels and all cables inside the distribution boxes.
20. Fire resistant and low smoke emission cable should be used.
21. Assembly points should be designated at the ground floor as per the requirements of fire and life safety measures.
22. Dos and don'ts laminated hanging pads should be available in all floors in prominent places.
23. Evacuation route plan should be displayed in each floor at prominent places.
24. If the construction is done with prefabricated materials, sufficient natural vent / mechanized ventilation system should be provided.
25. 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.
26. During construction of the building the following fire protection measures should be provided in good working condition:

- 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 of revised planning permission / no objection certificate to the proposed building subject to the fulfillment of the above mentioned conditions.

In view of compliance with the above said facts a revised PP/NOC is issued from the fire service point of view so as to accord planning permission for the above said proposed building subject to fulfillment of all the above said conditions, as recommended by the MSB committee. After completion of this project the fire licence should be obtained to ensure fire safety measures.

✓ *File 14-3-28*
for Director,
Fire and Rescue Services,
Tamil Nadu.



To:

M/s. D. Elamparithi,
Superintending Engineer,
Chennai North Circle - II,
Tamil Nadu Urban Habitat Development Board,
No.56, Old No.140,
Santhome High Road, Santhome,
Chennai - 600 004.

Copy to:

The Joint Director, Fire and Rescue Services,
Northern Region, Chennai.