



TAMIL NADU FIRE AND RESCUE SERVICES DEPARTMENT

From
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DGP / Director,
Tamil Nadu Fire and Rescue Services,
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To
The Member Secretary,
Chennai Metropolitan Development
Authority,
No.1, Gandhi Irwin Road,
Egmore, Chennai – 600 008.

R.Dis.No.14899/C1/2023
PP NOC No.168/2023

Dated.25.09.2023

Sir,

Sub : Tamil Nadu Fire and Rescue Services – Directorate – High Rise Building – Issue of Planning Permission NOC requested – Inspection at M/s. The Principal Secretary to Government, TNUHDB, Appavoo Nagar & Subbupillai Thottam Phase - I, Old S.No.3/1part, T.S.No.3/1, Block No.29 of Mambalam Village, Chennai - Reg.

Ref : 1) The CMDA letter No.C3(S)/292/2023, dated:14.08.2023.
2) The Joint Director, Northern Region, Report Rc.No.4260/C/2023, Dated:19.09.2023.

Kindly refer to the letter cited above. The MSB inspection committee of the northern region has inspected the site of M/s. The Principal Secretary to Government, TNUHDB, Appavoo Nagar & Subbupillai Thottam Phase - I, Old S.No.3/1part, T.S.No.3/1, Block No.29 of Mambalam Village, Chennai for which the 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 an application for the construction of residential building **block 4** consisting of stilt floor + 6 floors with the equal height of 20.60 meters up to terrace level. The plot area is 9276.54 sq. mtrs and the total floor area is 15869.83 sq. mtrs. The proposal has the side set-back of north at

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Pl. Communicate to EES
Follow up at CMDA
UM
3/10/2023
SP

10.15 meters, south at 6.05 meters, west at 6.60 meters and east at 8.95 meters for **block – 1**. The proposal has the side set-back of north at 12.16 meters, south at 6.83 meters, west at 8.95 meters and east at 5.45 meters for **block – 2**. The proposal has the side set-back of north at 6.83 meters, south at 5.98 meters, west at 6.22 meters and east at 5.33 meters for **block – 3**. The proposal has the side set-back of north at 8.21 meters, south at 4.85 meters, west at 6.25 meters and east at 6.22 meters for **block –4**.

Relaxation for the setback, spacing between blocks (8.95 meters for block 1 & 2, 6.83 meters for block 2 & 3, 6.22 meters for block 3 & 4 provided), vehicular access (4.5 meters provided) and one lift has been obtained for the blocks as per GO (3D) No.20, Dated.27.07.2023. Moreover no compound wall demarcating the place. Therefore, the road and the setback should be of the same level for easy movement of vehicles. The proposed occupancy is classified to come under Group A Residential Building, Sub-Division A-4 Apartments as per 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 down comer system along with hose reel assembly per thousand square meters area covering all floor areas with landing valves along with delivery hoses. The system should be fully charged with adequate pressure at all times & should have both automatic and manual operation. To feed the system a terrace level water tank of minimum capacity 25000 liters should be provided with refilling facilities for each. To charge the system an electrical pump of capacity 900 LPM should be provided near the terrace level water tank for each. The pump should be capable of developing pressure of 3.5 kg/cm² 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. Automatic sprinkler system should be provided at stilt floor if used for parking.
5. Public address system should be provided at all the floors.
6. Alternative & independent power systems should be provided to fire pumps, emergency lighting system and fire lift.
7. The first aid firefighting equipment's should be provided at all floors in accordance with the IS 2190: 2010 requirements
8. Fire exit - internal staircases and external staircase:-

Two staircases are provided for each block. Both the staircases are internal staircases with external wall should be naturally ventilated. One staircase to the first floor shall be converted as a ramp as the houses at 1st floor are for the physically challenged.

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 from 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 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.,

9. 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.
10. Fire lift, electrical installation and wiring, AC duct & other service ducts should meet the requirements of NBC of India, Part 8, 2016.
11. The width and height of any arch or gate, if any, should have the clearance of not less than 7 m respectively.
12. The entire setback area earmarked shall be hard paved or provided with reinforced concrete so as to withstand the weight of fire vehicle and should be completely kept free for the movement of fire vehicle.
13. The service ducts such as power cables, communication cables, A/C ducts etc., should be protected with proper fire sealing/fire dampers.
14. 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.
15. 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.
16. Fire resistant and low smoke emission cable should be used.
17. Assembly points should be designated at the ground floor as per the requirements of fire and life safety measures.
18. Dos and don'ts laminated hanging pads should be available in all floors in prominent places.
19. Evacuation route plan should be displayed in each floor at prominent places.

