



TAMIL NADU FIRE AND RESCUE SERVICES DEPARTMENT

From
Thiru. Abhash Kumar, I.P.S.,
DGP / Director,
Tamil Nadu Fire and Rescue Services,
No.17, RukmaniLakshmipathiSalai,
Egmore, Chennai – 600 008.

To
The Director,
Directorate of Town and Country
Planning,
CMDA Office Complex,
E&C Market Road, Koyambedu,
Chennai – 600 107.

R.Dis.No.10918/C1/2024

Dated. 23.08.2024

PP NOC No.161/2024

Sir,

Sub : Tamil Nadu Fire and Rescue Services – Directorate – High Rise Building – Issue of Planning Permission NOC requested - Inspection at M/s. Bekae Properties, T.S.No:125/2, 125/3, 126/2, Block No:73, Ward No:10, Bibikulam Village, Madurai North Taluk, Madurai - Reg.

Ref : 1) The applicant letter dated: 01.07.2024.
2) The Deputy Director, Southern Region, Report Rc.No.2981/C/2024, Dated:20.08.2024.

Kindly refer to the letter cited above. The MSB inspection committee of the southern region has inspected the site of M/s. Bekae Properties, T.S.No:125/2, 125/3, 126/2, Block No:73, Ward No:10, Bibikulam Village, Madurai North Taluk, Madurai for which the PP NOC has been requested. The committee has made certain observations with regards to fire and life safety, which are reproduced below:-

Observation:-

It is an application for issue of No Objection Certificate for planning permission for the construction of Residential Apartment Building consists of Ground floor part (Office)/Stilt floor part (parking) and 1st & 2nd floor part (Office) and Residential Apartment building (part) and 3rd floor to 9th floor is fully Residential Apartment building with the height of 29.95 mtrs. The total

plot area is 2964.25 Sq.m and the builtup area is 8966.33 Sq.m. The building is classified to come under group "A" Residential Building Sub-division A-4" Apartment houses and group "E" Business Building Sub-division A2 Office as per National Building code of India 2016 part 4 - Fire and Life safety.

Proposed Setback Area:

Minimum 7 meters setback area has been proposed all around the proposed residential apartment building.

DETAILS OF PROPOSED FLOOR WISE OCCUPANCY AND AREA

S.No	Floor Details	Proposed Occupancy
1.	Stilt (part)/Ground Floor(part)	Stilt floor - parking (Part) Ground floor - Office (part)
2.	First and Second Floor	Office (part) and Residential Apartment building (part)
4.	Third Floor to Ninth Floor	Residential Apartment Building
6.	Terrace Floor	Head Room, Lift Machine Room and open terrace

DETAILS OF PROPOSED STAIRCASES & RAMP:

Three numbers of staircases has been provided. One staircase width of 1.50 mtrs in Office building area and another two staircases each having width of 1.40 mtrs in Residential apartment building has been proposed.

DETAILS OF PROPOSED LIFT'S:

Four no's of lifts have been proposed in the residential building.

RECOMMENDATIONS ON FIRE & LIFE SAFETY

The following Fire & Life Safety measures shall be provided in the proposed residential building before the actual occupation, 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 system and sprinkler system an underground static water tank of minimum capacity 1,50,000 liters should be provided with refilling facilities. A terrace level tank of capacity 20,000 liters also should be provided. To charge the wet riser system and the sprinkler system one set of pumps should 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 should be interconnected at their delivery headers. One set of pumps consists an electrical pump of capacity 2280 LPM, an equal capacity of a Diesel Pump and one electrical pump of capacity 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/cm² at terrace level hydrant point.
2. The first aid fire fighting equipments should be provided at all floors in accordance with IS 2190:2010 requirements.
3. Fire service inlets fitted with NRV at ground level should be provided.
4. Hose reel assembly should be covering per 1000 sq.mtrs at all floors.
5. Manual Fire alarm call points should be provided at all floors.
6. Automatic sprinkler system shall be provided at stilt floor parking (part) and ground floor (part) Office and 1st & 2nd floor Office area.

7. Automatic detection shall be provided at stilt floor parking (part) and ground floor (part) Office and 1st & 2nd floor Office area.
8. Public Address System should be provided connecting all the floors.
9. Alternative & Independent power systems should be provided to Fire pumps, Emergency Lighting system and fire lift.
10. Fire escape staircase should be naturally ventilated or pressurized as per the clause 4.4.2.5 (b) and E2 of National Building Code of India part IV Fire and Life safety -2016.
11. General exit requirements:
 - a) As per clause 4.2.3 of the National building code of India part IV fire and life safety 2016 - every exit, exit passageway or exit discharge shall be continuously maintained free of all obstructions or impediments to full use in the case of fire or other emergency.
 - b) As per 4.2.4. Sufficient exits should be provided to permit safe egress of occupants, in case of fire or other emergency
 - c) As per 4.2.8 – exits shall be so arranged that they may be reached without passing through another occupied unit.
12. Fire Exit - Internal staircases and External staircase:-
 - (a) Three staircases have been proposed to be provided in all the floors.
 - (b) All the staircases are internal staircases with external wall should be naturally ventilated.
 - (c) 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.

- (d) 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.
- (e) All exits shall provide continuous means of egress to the exterior of a building or to an exterior open space leading to a street.
- (f) Exits shall be so arranged that they may be reached without passing through another occupied unit.
- (g) 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.
- (h) Entrance to the external stairs shall be separate and remote from the internal staircase.
- (i) Care shall be taken to ensure that no wall opening or window opens on to or close to an external stairs.
- (j) 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.
- (k) No external staircase, used as a fire escape, shall be inclined at an angle greater than 45° from the horizontal.

13. Fire escape balcony shall be provided in all the floors as per the proposed plan.

14. Fire lifts; shall be provided with the following specification

- (a) Fire lifts shall be provided for all occupancies with a minimum capacity for 8 passengers and fully automated with emergency switch on ground level. In general, buildings of 15m in height or above shall be provided with fire lifts.

- (b) In case of fire, only fireman shall operate the fire lifts. In normal course, it may be used by other persons.
- (c) Each fire lift shall be equipped with suitable inter-communications equipment for communicating with the control room on the ground floor of the building.
- (d) Staircase shall not be arranged round a lift shaft. Lift shall not open in staircases.

15. Floor Compartmentation:

All floors shall be compartmented with area of each compartment being not more than 750 m². Compartmentation shall be achieved by means of fire resisting wall of 2 h rating of fire curtain or water curtain. In case of water curtain, existing water storage shall be supplemented by water demand for water curtain nozzles for 60 min considering the largest size of compartment. The water supply for the water curtain nozzles shall be through independent electric pump of adequate capacity (flow and head) with piping / riser for the water supply to the nozzles.

16. Setback Area:

- b) The applicant shall 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 shall not be elevated from the ground level. The entry, movement and exit of the setback should have no slope and shall be hard paved and support the operation of the Aerial Ladder Platform.
- c) Any Ramp shall not 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.

- d) The compulsory open space as per DCR set back area all around the building shall 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 shall be allowed in the set-back area. The entire setback area earmarked shall be hard paved or in the setback area. The entire setback area earmarked the weight of the Aerial ladder platform.

17. Exit Doorways:

- a) Every exit doorways shall open into an enclosed stair way or a horizontal exit of a corridor or passageway providing continuous and protected means of egress.
- b) Exit doorways shall open outwards, that is, away from the room, but shall not obstruct the travel along any exit.
- c) Overhead or sliding doors shall not be installed.
- d) Exit doorways shall not open immediately upon a stairways.
- e) Exit doorways shall be openable from the side which they serve without a key.
- f) Mirrors shall strictly not to be placed in exit ways or exit doors.

18. Exit Signages:

- a) Illuminated exit signage's shall be provided with alternative source of power supply or battery back – up with "GLOWTYPE".

19. Electrical Installations:

- (a) Alternative & Independent power systems shall be provided to Fire Pumps, Emergency Lighting system and fire lift.
- (b) Fire resistant and low smoke emission cable shall be used.
- (c) Fire lift, Electrical Installation and wiring, AC duct & other service Ducts should meet the requirements of NBC of India 2005, Part 4 Fire and Life Safety.
- (d) The service ducts such as power cables, communication cables,

A/C. ducts etc. shall be protected with proper fire sealing / fire dampers.

(e) The cable gallery shall be routed through fire resistant duct or fire protected tray. Suitable detectors shall be provided along the lines of the cable gallery.

(f) 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. 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.

21. The width and height of any arch or gate, if any, should have the clearance of not less than 7 m.

22. Fire drill and fire order shall be conducted twice in a year & Fire order shall be kept ready.

23. Assembly points shall be designated at the ground floor as per the requirements on fire and life safety measures.

24. Do's and Don'ts laminated hanging pads shall be available in all floors in prominent places.

25. Evacuation route plan shall be displayed in each floor at prominent places.

26. A trained Fire Officer with a crew shall be arranged to maintain as well to operate the fire protection systems in case of any need.

27. If the construction is done with prefabricated materials, sufficient natural vent/mechanized ventilation system shall be provided.

28. 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.

29. During construction of the building the following fire protection measures shall be provided in good working condition:

- a) 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.
- b) Drums filled with water of 2000 liters capacity with two fire buckets on each floor.
- c) 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 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 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 compliance certificate should be obtained to ensure fire safety measures.

Proposed 28/8/24
for Director,
Fire and Rescue Services,
Tamil Nadu.

To:

M/s. Bekae Properties Pvt Ltd.,
Kothari Buildings, 4th floor,
114 M G Road, Nungambakkam,
Chennai – 600 034.



Copy to:

The Deputy Director, Fire and Rescue Services,
Southern Region, Madurai.