



**Government of West Bengal**  
**Office of the Director General**  
**West Bengal Fire & Emergency Services**  
**13D, Mirza Ghalib Street, Kolkata – 16**

**Memo No.: FSR/221862406300005080**

**Date : 08-10-2024**

**From :  
Director  
Fire Prevention Wing,  
West Bengal Fire & Emergency Services**

**To :  
093,381,PRINCE ANWAR SHAH ROAD  
SAJAL KUMAR BOSE AUTHORISED SIGNATORY OF PARK CHAMBERS LIMITED**

**Sub: Fire Safety Recommendation for proposed construction of G+VII Storied Residential Building U/S 393 A of KMC Act -1980 complying KMC Building Rule - 2009 at the premises no. 381, Prince Anwar Shah Road, Ward 93, Borough X, P.S. Jadavpur, Kolkata 700 068. .**

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Application Reference : KMC (CAF - 2024100146) received on 19-Aug-2024 regarding Fire Safety Recommendation for proposed construction of G+VII Storied Residential Building U/S 393 A of KMC Act -1980 complying KMC Building Rule - 2009 at the premises no. 381, Prince Anwar Shah Road, Ward 93, Borough X, P.S. Jadavpur, Kolkata 700 068. .

**The plan submitted by you was scrutinized and marked as found necessary from Fire Safety point of view. In returning one set of plan with recommendation, this office is issuing Fire Safety Recommendation in favor of the aforesaid building for compliance of the following fire safety measure.**

**Recommendation :**

**CONSTRUCTION:**

1. The whole construction of the proposed Residential building shall be carried out as per approved plan drawings conforming the relevant building rules of local Municipal Body.
2. The floor area exceeds 750 m<sup>2</sup> shall be suitably compartmented up to ceiling level having at least two hours Fire resisting capacity.



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3. The interior finish decoration of the building shall be made low flame spread materials conforming relevant I.S. specifications.
4. Provision of ventilation at the crown of the central core-duct of the building shall be provided.
5. Arrangements shall have to be made for sealing of all the vertical & horizontal ducts by the materials of adequate Fire resisting capacity.
6. Respective provisions of NBC Part 4, 2016 must be incorporated in respect of construction and maintenance of fire and life safety arrangement for the entire project.

#### **OPEN SPACE & APPROACH:**

1. The open space surrounding the building shall conform the relevant building rules as well as permit the accessibility and manoeuvrability of Fire appliance including Aerial Ladders with turning facility.
2. The approach roads, internal road / driveway shall be sufficiently strong to withstand the load of Fire Engine weighing up to 45 M.T.
3. The clear width and height of the access gates into the premises shall not be less than 6M & 6 M respecting the abutting road.

#### **EXIT:**

1. No exit door from any occupancy of any floor in a distance is not more than the distance as specified in N. B. C. Part -4, 2016. The travel distance to an exit from dead end of a corridor shall not exceed the respective provision of N. B. C. Part -4, 2016.
2. Exits shall be so arranged that at least two separate exits are available in every floor area. Exits shall be as remote from each other as practicable and so arranged that there shall be no pocket or dead end occurred in which occupants may trap.
3. Every exit door way shall open into an enclosed stairway or a horizontal exit of a corridor.

#### **STAIRCASE:**

1. The staircases of the building shall be enclosed type as shown. Entire construction shall be made of bricks/ R.C.C type having Fire resisting capacity not less than 2 hours.
2. The Staircases of the building shall have permanent vents at the top and openable sashes at each floor level in the external wall of the building.
3. The width of the staircases shall be made as marked in the plan. Corridors and the exit doors shall conform the relevant building rules, with up-to-date amendments.
4. All the staircases shall be extended upto terrace of the building and shall be negotiable to each other without entering into any occupied area.
5. Fire and smoke doors (FCD) at the entrances of all the staircase enclosures as



marked in the plan at each floor level shall be provided. The F.C.D. shall be of at least two hours Fire resisting wire glass window flitted with self-closing type, openable in the direction of escape.

6. Considering the staircases are only means of evacuation, emergency lighting arrangement directional, exit, sign etc. shall be made conforming the relevant I.S. Code in this regards.

#### **LIFT:**

1. The walls of the lift enclosure of the building shall be at least two hours FIRE resisting type and all the lift lobbies and shafts shall be pressurized as per existing norms and provision of NBC Part 4, 2016.

2. The lifts of the building shall be designed at high speed "Fire Lift" and shall be conspicuously indicated / marked.

3. Exit doors of the lift shafts shall be through a self- closing smoke stop door of 2 hours fire resistance.

4. The Electric power shall be from separate supply mains in the building and cables run within the lift shafts, lights and fans in the lift cars shall be operated from 24 volts supply on emergency, in case of failure of normal power supply lift shall automatically trip to alternate power supply.

5. All other requirements shall conform relevant I.S. specification including the communication facility in the lift cars which shall be connected with the Fire Control Room of the building.

#### **Fire Fighting Water:**

Overhead water reservoir of 10,000 L capacity exclusively for Fire fighting purpose with replenishing arrangements @ 1000 lts./min. Preferably from two different sources of water supply shall be provided. The water reservoir shall have overflow arrangement with the domestic water reservoir as well as to avoid stagnancy of water. The water reservoirs shall be kept full at all time.

#### **Hydrant system:**

The building shall be provided with Down Comer of 100 mm internal diameter pipe line with provision of landing valves at the Staircase landings/ half landings at the rate of one such down comer for 1000 sq. m. of floor area. The system shall be so designed that shall be kept charged with Water all the time under pressure and capable to discharge 900 lts/ min. The running pressure shall not be less than 3.5 Kgs / cm<sup>2</sup> in any case.

Provision of standard Hose Reel Hose supplied from the overheard reservoir through Booster Pump shall have to be made, satisfy the code of I.S. 3844-1989.

One such terrace pump of equal capacity shall be installed as stand by fire pump.

Fire Service Inlet shall be installed near the entrance of the building.

#### **Electrical Installation & Distribution:**

1. The electrical installation including transformers, Switch Gears, L. T., H. T. Rooms, panel rooms, Main & Meters etc. and the distribution system of the premises shall be made satisfying the code of practice for Fire safety in general building as laid down in I.S.



concealed wiring or in heavy gauge M.S. conduit continuously bonded to earth. Cables shall be I.S. marked and be of F.R.L.S. categories.

3. The vertical & horizontal ducts shall be sealed at all floor level by approved fire resisting materials.

4. The electrical installation shall be adequately protected with automatic fire detection and suppression system as per provision of N. B. C. Part– IV, 2016 and relevant I. S. specification.

5. Alternative Power Supply :

Arrangements shall have to be made to supply power with the help of generators of suitable capacity to operate at least the Fire Pump, Pumps for deep Tube-well, Fire Detection and Alarm System, pressurization, ventilation, signage etc. and also for illuminating the Staircases, corridors etc. and other places of assembly of the building in case of failure of normal power supply.

DETECTION AND ALARM SYSTEM:

1. Addressable analogue manually operated Electrical Fire Alarm system with adequate numbers of break glass type call boxes fitted with Hooters along with public address system, at each floor, connecting with visual panel board shall be made in Control Room. The Control Room shall be located at the entrance of Ground Floor of the building, other requirements of the system shall be made conforming I.S 2189-1988.

2. Auto Fire Detection System with the help of Smoke Detectors shall be installed in Assembly hall, Gym, Games and lounge area of below and preferably above false ceiling. The other requirements of the system shall be made in accordance with I.S. 2189-1988.

3. Hooters will be sounded in such a manner so that an operation of a Detectors or Manual Call Point. Hooters will be sounded on the same floor and immediate alternate floor.

4. Public Address System linked between all floors and Control Room shall have to be established.

5. All the installations shall also be satisfy the I.S. specifications 2189 (as amended) and the code of practice as laid down in the N.B.C. Part-4, 2016.

C. C. Camera & Public Address System :-

C.C. Camera and Public address system linked between all floors and Fire Control Room shall have to be established.

Fire Control Room:

A well designed Fire Control Room with C.C.T.V. and Fire Control Panel and 24 X 7 monitoring system shall be provided.

Preparation of Emergency Evacuation:

i. There is need to have a clear policy for emergency evacuation plan.

**Air Conditioning System (If Any):**

1. The A.H.U. shall be separated for each floor with the system Air Ducts for individual floors.

2. Arrangement shall be made for isolation at the strategic locations by incorporating auto dampers in the Air Conditioning system.

3. The system of auto shut down of A.H.U. shall be incorporated with the auto detection and alarm system.

4. The air handling units room shall not be used for storage of any combustible materials.

**Fire Kiosk:**

One Fire Kiosk for the proposed building as mentioned there in containing the following fire fighting



and rescue equipment:

- i) 4 nos. 4.5 kg. CO<sub>2</sub> extinguisher.
- ii) 4 nos. 4.5 kg. ABC type extinguisher.
- iii) 2 nos. ceiling hook.
- iv) 4 nos. Fire Bucket.
- v) 1 no. Lock Cutter.
- vi) 2 nos. 14 lb. Hammer.
- vii) 2 nos. Crowbar.
- viii) 1 no. Insulated Axe.
- ix) 2 nos. Stretcher.
- x) 2 nos. Smoke Hood.
- xi) 2 nos. Torch Light.

Details of all floors in all block plans along with details of Fire Fighting equipment and installations shall be maintained in fire kiosk.

#### **FIRST AID FIRE FIGHTING SYSTEM:**

First Aid Fire fighting arrangement in the style of placing suitable type of portable Fire Extinguishers, Fire Buckets etc. in all floors and vulnerable locations of the premises shall be made in accordance with I.S. 2190-1992.

#### **GENERAL RECOMMENDATIONS:**

1. Fire License shall have to be obtained for proposed storing and processing with L.P.G. and other highly combustible articles (if any).
2. Necessary sanction and approval for such construction and occupancy of this project must be obtained from competent authorities.
3. Lightning arrestor and air craft warning lights shall have to be installed as per existing norms and relevant IS specification.
4. Disposable type B. A. Musk of sufficient quantity to be kept always available for emergency situation.
5. Fire Notice for Fire Fighting and evacuation from the building shall be prepared and be displayed at all vulnerable places of the building.
6. Floor numbers and directional sign of escape route shall be displayed prominently.
7. The employees and security staff shall be conversant with installed Fire Fighting equipments of the building and to operate in the event of Fire and Testing.
8. The Department of Fire & Emergency Services, Government of West Bengal, shall not take any responsibility in respect of any legal dispute if pending or arises about the title of land / property.
9. This Fire Safety Recommendation cannot be treated in any case of regularizations of any unauthorized construction.
10. The management of the organization / building, as the case may be, shall maintain the fire prevention and safety measures in good repair and in efficient condition at all the times, which are installed in the building for use at the time of



fire or other emergencies.

11. A crew of trained Fireman under an experienced officer shall be maintained round the clock for safety of the building.

12. Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of building.

Accordingly, a certificate is to be obtained from the Director General, West Bengal Fire & Emergency Services certifying about the satisfactory services, performance of all the Fire and Life Safety arrangements and installation of the building.

On compliance of all the above Fire and Life safety recommendations, the Director General, West Bengal Fire & Emergency Services shall be approached for necessary inspection and testing of the installation, Fire Safety Certificate in favour of the occupancy shall be issued on being satisfied with the tests and performances of fire & life safety aspects of the buildings.

N.B.: Any deviation and changes in the nature of construction and use of the building, in respect of the approved plan drawing, without obtaining prior permission from this office, this Fire Safety Recommendation shall be treated as cancelled.

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**Director**

**West Bengal Fire & Emergency Services**