



**Government Of West Bengal  
Office Of The Director General  
West Bengal Fire & Emergency Services  
13D, Mirza Ghalib Street, Kolkata - 16**

Memo no.:FSR/0225186238701006

Date: 13-12-2023

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

**To: ABDUL SAMAD AZAD PARTNER OF KZAR DEVELOPERS LLP AND CONSTITUTED ATTORNEY OF EKRAM HOTEL PVT LTD  
069,7,PRAMATHES BARUA SARANI**

**Sub: Fire Safety Recommendation for proposed construction of G+11 storied Residential Building at 7,PRAMATHES BARUA SARANI, Ballygunge, Kolkata-700019.**

Application Reference : KMC (CAF-2023080107) received on 17-09-2023 regarding the Fire Safety Recommendation for proposed construction of G+11 storied Residential Building at 7,PRAMATHES BARUA SARANI, Ballygunge, Kolkata-700019.

**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 is issuing Fire Safety Recommendation in favor of the aforesaid building subject to the compliance of the following fire safety measure.**

**Recommendation:**

RECOMMENDATION

A.CONSTRUCTION:

- 1.Whole construction of the building shall be carried out as per building rules of local body.
- 2.Materials for rapid flame spread categories including untreated wood fiber board etc. shall be not use. The doors and windows preferably shall be made of metal.
- 3.The interior finish decoration of the building shall be made with the materials with low flame spread and low smoke and toxic gas generating categories conforming I.S. Specification.
- 4.Arrangement shall have made for sealing all the vertical service ducts by the materials of adequate Fire resisting capacity.
- 5.Fire rating test certificate of all interior finish decoration should be submitted to this office before taking occupancy.

6. Service Ducts and shafts should be enclosed by a walls of 2 hours and doors of one hour fire rating. All such ducts shall be properly sealed and fire stopped at all floor level.

#### B. OPEN SPACE & APPROACH:

1. The open space surrounding the building shall be kept clear open to sky and shall conform the relevant building rules as well as permit the easy accessibility and maneuverability of the Fire appliances with turning facility.

2. The approach road and roads surrounding the building shall be sufficiently strong to withstand the load of Fire Engine weighting up to 45 M.T.

3. The width and height of the entry gates to the promises shall not be less than 5m and 5m respectively.

4. Driveway should be free of any type obstruction. No parking will be allowed on the Drive Way.

#### C. STAIRCASE:

1. The staircase of the building shall be enclosed type, entire construction shall be made of brick / R.C.C. type having Fire resisting capacity not less than 4 hours respectively marked in the plan.

2. The staircases shall have permanent vents at the top equal to 5% of the cross sectional area of the staircases enclosures and open able sashes at each floor level equal to 15% of the said cross section are shall have to be provided in the external wall of the building.

3. All the staircase of the building shall be negotiable to each other in each floor without entering into any room and shall be extended up to respective terrace. The roof of the stair wall shall be 1M above the surrounding roof area.

4. The width of the staircases and corridors and travel distance of different categories of occupancies shall have to conform the relevant building rules.

5. Fire and Smoke check doors at the entrances of all the Staircase enclosures at each floor level shall be provided. The F.C.D. shall be at least one hour Fire resisting wire glass window fitted with self closing type open able 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.

**REFUGE AREA:** Shall be provided in all blocks at height of 24m/ as marked in the plan drawing having minimum area not less than 15.0sqm. FCD shall be provided as shown/marked in the plan drawing. No window or other openings shall be allowed in the refuge area.

**BASEMENT:** Basements shall be adequately ventilated. Mechanical smoke extractors shall be installed in absence of natural ventilation as per NBC, Part-IV-2016 and relevant I.S. specification.

#### D. LIFT:

1.The walls of the lift enclosure of the building shall be at least two hours FIRE resisting type respectively marked in the plan with the event at top of area not less than 0.2m<sup>2</sup>.

2.Lift doors shall be enclosed type, Collapsible gates shall not be permitted.

#### E.FIRE FIGHTING WATER:

1.Under ground Water Reservoir exclusively for Fire Fighting operation shall be ensure minimum 100000 ltrs. and over head reservoir 10000 ltrs in each building.

2.The Fire water reservoir shall be having overflow arrangement with the domestic reservoir to avert stagnancy of water.

3.Provision of necessary manhole shall be made on the top of the reservoir as per specification.

4.Provision of replenishment at the rate of at least 1000lts./min. from two separate sources of water supplies shall be made.

5.The deep tube wells for the replenishment of the reservoir shall be incorporated with the auto starting facility with the actuation of auto detection and suppression arrangement of the premises and shall also be connected with dual power supply units.

#### G. WATER LAYOUT SYSTEM :

##### a. Hydrant System:

i.150 mm dia Ring main water layout arrangement covering the entire premises of the project with provision of yard hydrants with hose boxes, containing 1 lengths of 63mm delivery hose and short branch pipe shall be provided at all the strategic location and surrounding the building conforming I.S. 3844-1989 (upto date amendment).

ii.The system shall be so designed that shall always be kept charged with water under pressure and capable to discharge 2280ltrs./min. and minimum 900 lpm at the top most out let. Minimum discharge pressure shall not be less than 3.5kg/cm<sup>2</sup>.

##### b.Wet riser & Hose Reels System :-

i.The building shall be provided with wet riser at 100mm internal dia pipe line with provision of outlets in each floor at the staircases landings/half landings as per suitable at the rate of one such unit of down comer and Hose Reel per 1000sq.m. of floor area.

ii.Hose Reel Unit:- Provision of hose reel units on swiveling drum in conjunction with wet riser near each landing valves shall be made at each floor level of the building.

iii.Automatic sprinkler system shall be incorporated in all floors of mercantile and assembly occupancy in block-4 and in all basement floors..

iv.All other requirements of the water base Fire Protection System shall be made as per I.S. Specification 3844-1989 (with up to date amendment).

**K.FIRE PUMP:**

1. Main fire pump of 2280 lpm.
2. Jockey pump of 180 lpm.
3. Standby pump(preferably diesel driven) of 2280 lpm.
4. All fire pumps shall be accommodated with alternate source of power supply.

**L. ELECTRICAL DISTRIBUTION SYSTEM:**

1.Electrical distribution system of all the building shall be made in the form of concealed wiring or in heavy gauge M.S. conducted continuously bonded to earth cables shall be I.S. marked and preferably be of F.R.L.S. categories.

2.Electrical distribution System shall conform all the requirements laid down in I.S. 1646-1982.

3.All electrical installation viz. Transformers, Switch Gears, L.T., HT rooms shall be protected with both auto detection and suppression systems as per suitability.

**M. DETECTION AND ALARM SYSTEM :**

1.Addressable analogue manual call boxes incorporating with sounders shall be installed in all the floor area of the building in such a manner that maximum travel distance shall not be more than 30 m in order to reach any of the call point. Smoke/flame detectors shall be provided in the commercial areas of the buildings.

2.Auto fire detection with the help of smoke detectors below and above false ceiling shall be provided other than residential areas.

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

4.All the installation shall also satisfy the I.S. Specification 2189 as amended and the code of practice as laid down in N.B.C. pt. IV.

**N. 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) Arrangements shall be made for isolation at the strategic location by incorporating auto dampers in the air conditioning system.

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

4) The air handling unit's room shall not be used for storage of any combustible materials.

**P.FIRST AID FIRE FIGHTING SYSTEM :**

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

2.Special rescue equipment like Smoke Hood, self contained B.A. set portable lights at least two pairs (4sets) shall be made available in the main fire Control Room of the premises.

**Q.GENERAL RECOMMENDATIONS :**

1.Floor numbers and directional sign, showing the nearest exit Refuge Area. Fire Points etc. shall have photo luminescent signals at each floor of all blocks of building including shall be made available conforming the relevant I.S. Specification.

2.Provision of emergency illuminating exit shall be made at all floor levels of all blocks of building conforming the I.S. Specification.

3.Fire license have to be obtained for proposed storing and processing with highly combustible articles

4.If diesel oil is stored beyond the specified quantity license shall be accorded from the appropriate authority.

5.The occupants, employees and security staff shall be conversant with installed First aid Fire Fighting equipments of the building and to operate in the event of Fire and Testing.

6.Arrangement shall be made for regular checking, testing and proper maintenance of all the Fire Safety installation and equipments and means of escapes installed in the building to keep them in perfectly good working conditions at all times by authorized competent agency is this regard.

7.Practice and evacuation drill shall be arranged at regular interval of time involving all the occupants and security staff shall be recorded.

8.Trained and experienced Fire Fighting staff under the qualified and experienced fire officer shall be maintained round the clock.

This shall be tested as Fire Safety Recommendation 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 favor of the occupancy shall be issued on being satisfied with the tests and performances of safety aspects of installation of the building.

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

Signature Not Verified  
Digitally signed by ABHIJIT  
PANDEY  
Date: 2023.12.18 12:37:44 IST

**DIRECTOR**  
West Bengal Fire & Emergency Services