



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

Memo No.: FSR/211862406300007191

Date : 28-01-2025

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

To :
**Aqua Park Garden & Resorts Pvt Ltd
102 A & 102C, Jagannathpur, Moza-Fuleswar, J.L. No-108, Dist -Howrah-711316**

Sub: Fire Safety Recommendation (FSR) for Proposed Construction of a G+VI storied Residential Building at premises no. – R.S. DAG NO. – 3801, 3802, 3803, 3804, 3681, 3682, 3668, L.R.DAG No. – 3838, 3839, 3840, 3841, 3705, 3706, 3692, J.L.No. – 108, Mouza – Fuleswar, under Uluberia Municipality, P.O – Uluberia RS SO, P.S – Uluberia, Dist. – Howrah, Pin – 711316 , West Bengal..

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This is in reference to your AIN 211862406300007191 dated 16-Oct-2024 regarding Fire Safety Recommendation (FSR) for Proposed Construction of a G+VI storied Residential Building at premises no. – R.S. DAG NO. – 3801, 3802, 3803, 3804, 3681, 3682, 3668, L.R.DAG No. – 3838, 3839, 3840, 3841, 3705, 3706, 3692, J.L.No. – 108, Mouza – Fuleswar, under Uluberia Municipality, P.O – Uluberia RS SO, P.S – Uluberia, Dist. – Howrah, Pin – 711316 , West Bengal.

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 :

A) Construction :

1. The whole construction of the building shall be carried out as per submitted plan drawings conforming the relevant building rules of competent authority.
2. The interior finish decoration of the building shall be made low flame spread materials conforming I.S. specifications.
3. Arrangement shall have to be made for sealing all the vertical and horizontal ducts by the materials of adequate fire resisting capacity.



4. Service Ducts and shafts should be enclosed by a wall of 2 hours and doors of 1 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 conform the relevant building rules as well as permit the accessibility and maneuverability of Fire appliance with turning facility.
2. The approach road/driveway shall be sufficiently strong to withstand the load of Fire Engine weighting up to 45 M.T.
3. The width and height of the access gates into the premises shall not be less than 5.0 M and height 5.5 M (as marked in the plan) respectively.
4. Drive way should be free from any type of obstruction. No parking will be allowed on the drive way.
5. All the passages should be kept clear for free access.

C) Staircase :

1. The staircase of the building shall be enclosed type. Entire construction shall be made of bricks / R.C.C. type having Fire resisting capacity not less than 4 hours marked in the plan.
2. The staircases of the building shall have permanent vents at the top equal to 5% of the cross sectional area of the staircase 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. The width of the staircases, corridors and travel distance of different categories of occupancies shall have to conform the relevant building rules.
4. The staircase shall be extended from ground level up to respective terrace of the building and shall be negotiable to each other in each floor without entering into any room.
5. Fire and smoke doors at the Entrances, Staircases enclosures as marked in the plan at each floor level shall be provided as per suitability.
6. The F.C.D. shall be of at least two hour Fire resisting wire glass window fitted with self-closing type open able in the direction of escape.

D) Lift :

1. The walls of the lift enclosure shall be at least two (02) hours fire resisting type. Collapsible gate shall not be permitted in lift car.
2. One of the lift shall be designed for Fire Lift. The word shall conspicuously indicate/mark at ground floor.
3. The electrical power shall be from separate supply mains in the building and cables run with in the lift shafts, light and fans in the lift cars shall be operated from respective volts, supply on emergency in case of failure of normal power supply lift shall automatically trip over alternative power supply.
4. Lift Communication system shall be provided in the lift and this system shall be connected to fire control of the buildings.
5. All other requirements shall conform the I.S. specification including the communication facility in the lift cars connecting to the Fire Control Room of the building.

E) Fire Fighting Water :

1. Underground water reservoir having total water capacity of not less than 10,000 ltrs.(as shown in the plan) exclusively for this fire fighting purpose shall be provided.
2. Overhead reservoirs of not less than 15,000 ltrs. (as shown in the plan) exclusively for Fire Fighting purpose shall be kept full at all time.
3. The Fire water reservoir shall have overflow arrangement with the domestic water reservoir as well as to avoid stagnancy of water.
4. Provision of replenishment arrangement @ 1000 ltrs./min. preferably from two different sources of water supply shall be provided.



5. Provision of necessary manhole shall be made on the top of these reservoirs as per specification.
6. Provision of placing Fire Appliances near the underground water reservoir to be made to draw water in case of emergency.
7. The water reservoirs shall be kept full at all time.

F) Pumps for Fire Fighting installation :

1. One no. Terrace Booster Main Fire Pump of 900 LPM.
2. One no. Terrace Booster stand by pump of 900 LPM.

All pumps must be kept in auto mode and shall be connected with alternative power supply.

G) Water Lay Out Down Comer System :

1. The building shall be provided with 100 mm. Down comer along with hose reel hose connected to Down Comer through the terrace booster pump of 900 LPM capacity with provision of landing valves at the staircase landings/ half landing at the rate of one such down comer for 1000 Sq. m of floor area.
2. The system shall be so designed that shall be kept charged with water all the time under pressure and shall not be less than 3.5 Kgs/Sq.cm. All other requirements shall conform I.S. 3844 :1989.
3. Provision for Hose Reel in conjunction with down comer shall be made at each floor level of main staircase of the building conforming the relevant I.S. Specifications.
4. Fire service inlet shall be installed in front of the building in accordance with the relevant I.S. Specifications.

H) Detection and Alarm System :

1. Manually operated Electrical Fire Alarm system with adequate numbers of break glass type call boxes fitted with Hooters shall be provided at each floor. The other requirements of the system shall be made conforming I.S. 2189 : 2008.
2. Hooter will be sounded in such a manner so that an operation of a Detector or Manual Call Point Hooters will be sounded on the same floor and immediate alternate floor.
7. Automatic fire detection system shall be provided in the shops on the ground floor, Electrical room along with as per suitability as per I.S. Specification.
3. Public Address System shall have to be provided and linked between all floors and control room.

I) Sprinkler Installation 15105:2002 : FSR/211862406300007191

The automatic Sprinkler installation shall be provided in the shops on the ground floor and as per I.S. Specification. Alarm gang to be incorporated along with the Sprinkler System.

J) Detection and Alarm System :

4. Manually operated Electrical Fire Alarm system with adequate numbers of break glass type call boxes fitted with Hooters shall be provided at each floor. The other requirements of the system shall be made conforming I.S. 2189 : 2008.
5. Hooter will be sounded in such a manner so that an operation of a Manual Call Points, Hooters will be sounded on the same floor and immediate alternate floor.

K) Electrical Installation & Distribution :

1. The electrical installation including transformers, Switch Gears, 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. specification 1946:1982.
2. The electrical installation shall be adequately protected with CO2/D.C.P/ABC. Type Fire Extinguishers.
3. Electrical installation should be tested by the licensed electricians periodically.



L) Transformer (if any) :

Transformer shall conform to the following :

1. A substation or a switched station with oil filled equipment shall not be located inside the building.
2. The substation structure shall have separate fire resisting was surroundings and necessarily be located at the periphery of the flow having separate access from the fire escape staircase.
3. The outside walls ceiling, floor, opening including doors & windows to the substation area shall be provided with a fire resisting door of 2 hours fire rating.
4. Direct access to the transformer room shall be provided, preferably from outside the fire escape staircase.

M) Alternative Power Supply :

Arrangements shall have to be made to supply power with the help of a generator to operate at least the Fire Pump, Pump for deep Tube-well, Lift, Fire Alarm System, etc. and also for illuminating the Staircase, corridors etc. and other places of assembly of the building in case of normal power failure.

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. 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.

O) First Aid Fire Fighting System :

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.

P) Small Gears - IS -903 -1993 :

Hose box , 15 M length Pemoline delivery hose, Gun Metal short branch of half inch dia. One set at each half landing hydrant should be installed.

Q) General Recommendation :

1. Fire License shall have to be obtained for proposed storing and processing with L.P.G (for commercial usage) and other highly combustible articles.
2. Fire Notice for Fire Fighting and evacuation from the building shall be prepared and be displayed at all vulnerable places of the building.
3. Telephone numbers of all emergency services/Department to be kept in counter and displayed in conspicuous places.
4. The security staff and occupier shall be conversant with installed Fire Fighting equipment's of the building and to operate in the event of Fire and Testing.
5. The Arrangement shall be made for regular checking, testing and proper maintenance of all Fire Safety installation and equipment's installed in the building to keep them in perfectly good working conditions at all times.
6. A trained Fireman shall be maintained round the clock for safety of the building.
7. Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of building.
8. A certificate is to be obtained from the Director General, West Bengal Fire & Emergency Services



certifying about the satisfactory services, performance of all the Life and Fire Safety arrangements and installation of the building.

9. "NO SMOKING" sign to may be displayed in prominent place in Hindi, English and local languages.

10. Floor numbers and Directional Sign of Escape Route shall be displayed prominently.

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

On compliance of all the above Life and Fire Safety Recommendation, the Director General, West Bengal Fire & Emergency Services shall be approved for necessary inspection and testing of all the installation, Fire Safety Certificate in favour 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 (FSR) will be treated as cancelled.

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Director
West Bengal Fire & Emergency Services