



Government Of West Bengal
Office Of The Director General
West Bengal Fire & Emergency Services
130, Piazza Ghalib Street, Kolkata - 16

Date: 13-04-2021

Memo no.: FSR/0125186218700232

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

To: Prolay Mandal, C.A. of Anshul Agarwala and Education Unlimited Trust
164/1, Manicktala Main Road, Kolkata - 700054

Sub: Fire Safety Recommendation for proposed construction of G+XII storied under group Residential Building at premises no. 79/6, Acharya Jagadish Chandra Bose Road, Kolkata- 700014.

This is in reference to your application no. 0125186218700232 dated 01-03-2021 regarding the Fire Safety Recommendation for proposed construction of G+XII storied under group Residential Building at premises no. 79/6 Acharya Jagadish Chandra Bose Road, Kolkata- 700014.

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:

A. CONSTRUCTION:

1. The whole construction of the proposed building shall be carried out as per approved plan drawings conforming the relevant building rules of local Municipal Body.
2. The interior finish decoration of the building shall be made of low flame spread materials conforming to I.S. specifications.
3. Provision of ventilation at the crown of the central core-duct of the building shall be provided.
4. Arrangements shall have to be made for sealing all the vertical & horizontal ducts by the materials of adequate Fire resisting capacity & the doors of service ducts / shafts of 2hr. Fire rating.

B. OPEN SPACE & APPROACH:

1. The open spaces surrounding the building shall conform the relevant building rules as well as permit the accessibility and maneuverability of Fire Appliances with turning facility.
2. The approach road shall be sufficiently strong to withstand the load of Fire Engine weighting up to 45 M.T.

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5. The width and height of the access gates into the premises shall not be less than 4.5 and 5 M respectively abutting the road.

C. STAIRCASE:

1. The staircase of the building shall be enclosed type. Entire construction shall be made of bricks / RCC type having Fire Resisting Capacity not less than 4 hours.
2. The staircase of the building shall have permanent vents at the top and open able sashes at each floor level in the external wall of the building.
3. The width of the Staircase shall have to be made as shown in the plan. Corridors and the exit doors shall conforming the relevant building rules.
4. Fire & Smoke doors at the entrance of staircase enclosures as shown / marked in the plan at each floor level shall have to be provided. The F.C.D. shall be of the least two hour Fire resisting Wire Glass Window fitted with self closing type openable in the direction of escape.

D. LIFT:

1. The walls of the lifts enclosure shall be at least two hours Fire Resisting type.
2. Collapsible gate shall not be permitted.
3. In case of failure of normal electric supply, it shall automatically trip of alternate supply and also shall have manually operated change over facility. Alternatively, the lift shall be so wired that in case of power failure, it comes down at ground level stands still with door open.
4. All the lifts of the building shall be designed as high speed "FIRE LIFT" and shall be conspicuously indicated / marked.

E. REFUGE AREA:

1. The Refuge areas shall be provided on the external wall as cantilever projection for Residential Building as shown in plan drawings not less than 15 Sq. mtr. area at the level of 26.095 M as shown / marked in the plan.
2. The refuge areas shall be of Fire resisting construction and protected with self-closing F.C.D. at the entrance from the corridor or the staircase landings.
3. The position of refuge Areas shall be such that they are negotiable by the Fire service Aerial Ladder from the ground floor.

F. FIRE FIGHTING WATER :

Under Ground Water Reservoir of 120,000 ltrs capacity for entire premises and Over Head Water Reservoir of 10,000 Ltrs capacity exclusively for Fire Fighting purpose with replenishing arrangements @1000 ltrs/min. preferably from two different sources of water shall have to be provided. The water reservoirs shall have overflow arrangement with the domestic water reservoir as well as to prevent stagnancy of water. The water reservoirs shall be kept full at all time.

G. WATER LAYOUT SYSTEM:

1. The building shall be provided with Wet Risers of 100 mm dia internal diameter Pipe Line each with provision of landing valves at the Staircase landings / half landings at the rate of one such riser 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 2280 ltrs/min.

one ground floor level outlet and minimum 400 l/s/min. at the top most and farthest outlet. In both cases the running pressure shall not be less than 3.5 kg/cm². All other requirements shall be conforming I.S. 3844 - 1989.

2. Provision for Hose Reel units in connection with Wet Riser shall be made near each landing valves.

3. Provision of adequate numbers of Fire Hydrant with atleast one number Fire Service Inlet shall be installed surrounding the building in accordance with relevant I.S. specifications.

H. FIRE PUMP:

1. Provision of the Fire Pump shall have to be made to supply water at the rate designed pressure and discharge into the Water based system, which shall be installed in the building. One such pump shall always be kept on stand-by preferably be of diesel driven type.

2. Provision of Jockey Pump shall also have to be made to keep the Water based system under pressurized condition at all the time. All the pumps shall be incorporated with both manual and auto starting facilities. The suction of pumps shall preferably of positive type or in case of negative suction the system shall be wet riser-cum-down comer with suitable terrace pump with overhead tank.

I. Sprinkler Installation:

The automatic sprinkler installation shall be provided in entire 1st floor to 4th floor area of the building and alarm gang to be incorporated along with the sprinkler system. Sprinkler test line shall have to be provided.

J. 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. Electrical distribution system shall conform all the requirements as laid in I. S. 1646-1982.

3. The electrical installation shall be adequately protected with automatic CO₂/D.C.P.

4. All electrical installation viz. Transformer Switch Gear L. T., H. T. rooms shall be protected with both auto detection and suppression systems as per suitability.

5. 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, Fire Alarm System, etc. and also for illuminating the Staircase, corridors etc. and other places of assembly of the building incase of normal power failure.

K. DETECTION AND ALARM SYSTEM:

1. Manually operated Electrical Fire Alarm system with atleast two numbers of break glass type call boxes fitted with Hooters along with public address system at each floor in each block connecting with audio-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. Smoke / Heat detectors shall have to be provided in 1st floor to 4th floor area as per suitability as per I.S. specification.

3. CCTV & Public Address System: 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 monitoring 24 X 7. Preparation of Emergency Evacuation: ii. There is need to have a clear policy and proper implementation of emergency evacuation measures.

L. FIRST AID FIRE FIGHTING SYSTEM:

First Aid firefighting arrangement in the style of placing suitable type of portable Fire Extinguishers, Fire buckets etc in all floors, basements and vulnerable locations of the premises shall be made in accordance with I.S. 2190-92.

M. GENERAL RECOMMENDATIONS:

1. Fire Notice for Fire Fighting and evacuation from the building shall be prepared and be displayed at all vulnerable places of the building.
2. Floor numbers and directional sign of escape route shall be displayed prominently.
3. The occupancy and security staff shall be conversant with installed Fire Fighting equipments of the building and to operate in the event of Fire and Testing.
4. Arrangement shall be made for regular checking, testing and proper maintenance of all the Fire Safety Installation and equipments installed in the building to keep them in perfectly good working conditions at all times.
5. A crew of trained Fireman under an experienced officer shall be maintained round the clock for safety of the building.
6. Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of building.
7. The certificate has 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 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 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 drawings, without obtaining prior permission from this office, this Fire Safety Recommendation will be treated as cancelled.

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Date: 2021.04.07 07:45:05 IST

Director
West Bengal Fire & Emergency Services