

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

Memo No.: FSR/211862406300005738 Date: 08-10-2024

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

To:

G Plus 12 Storied Residential Building 44/A JAINUDDIN MISTRY LANE, AT PREMISES NO 2 GOBINDA AUDDY ROAD, CHETLA, KOLKATA-700027

Sub: Fire Safety Recommendation for proposed construction of G+XII storied Residential Building at the premises no. 44/A, Jainuddin Mistry Lane, at premises no. 2 gobinda auddy road, chetla, Kolkata-700027..

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This is in reference to your AIN 211862406300005738 dated 07-Sep-2024 regarding Fire Safety Recommendation for proposed construction of G+XII storied Residential Building at the premises no. 44/A, Jainuddin Mistry Lane, at premises no. 2 gobinda auddy road, chetla, Kolkata-700027.

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 building shall be carried out as per approved plan drawings conforming the relevant building rules of local Municipality Body .
- 2. The floor area exceeds 750 m2 shall be suitably compartmented by separation walls up to ceiling level having two hours fire resisting capacity.
- 3. The interior finish decoration of the building shall be made low flame spread materials conforming I.S. specifications.
- 4. Provision of ventilation at the crown of the central core duct of the building shall be provided.



5. Arrangement shall have to be made for sealing all the vertical and horizontal ducts by the materials of adequate fire resisting capacity.

OPEN SPACE AND 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 roads shall be sufficiently strong to withstand the load of Fire Engine weighting 45M.T.
- 3. The width and height of the access gate into the premises shall not be less than
- 4.5 mts. and 5.0 mts. respecting the abutting road.
- 4. Drive way should be free from any type of obstruction. No parking will be allowed on the drive way.
- 5. All the Passage way should be kept clear for free access.

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.
- 2. The staircase of the building shall have permanent vents at the top and openable sashes at each floor level in the external walls of the building.
- 3. The width of the staircase shall be made as marked in the plan. Corridors and the exit doors shall conform the relevant Building Rules with up to date amendment.
- 4. All the staircase shall be extended up to terrace of the building and shall be negotiated to each floor.
- 5. Fire and smoke doors 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 one hour Fire Resisting wire glass window fitted with self-closing type openable in the direction of escape.

LIFT:

- 1. The walls of the lift enclosure shall be at least two hours Fire Resisting type.
- 2. Collapsible gate shall not be permitted.
- 3. One of the lift shall be designed for Fire Lift. The word "FIRE LIFT" shall conspicuously written at ground floor.
- 4. Lift and Lift Lobby shall be communicated to the basement and shall have to be pressurized as per guide line of N.B.C. part-IV, Annexure 'C'

FIRE FIGHTING WATER:

Underground water reservoir having water capacity of 1,00,000 Ltrs. and overhead water reservoir having capacity of 15,600 Ltrs. (As shown in the submitted plan drawing) for exclusively for fire fighting purpose with replenishing arrangements @ 1000 Ltrs./min. preferably from two different sources of water supply shall be provided. The water reservoirs shall have overflow arrangement with the domestic water reservoir as well as to avoid stagnancy of water. The water reservoir shall be kept full at all time.

HYDRANT SYSTEM:

- 1. The building shall be provided with separate wet Riser of each building of 150mm. Internal diameter pipe Line with single outlet 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 2280Lts./min. at the ground floor level outlet and minimum 900 Lts./min. at the top most outlet. In both cases the running pressure shall not be less than 3.5 Kgs/cm2. All other requirements shall conform I.S. 3844 1989. 2. Provision of Hose Reel in conjunction with wet Riser shall be made at each floor level conforming the relevant I.S. specification.
- 3. Ring Main Hydrant with provision of adequate numbers Hydrant shall be installed surrounding the project in accordance with relevant I.S. specification.

SPRINKLER INSTALLATION:

The automatic sprinkler installation shall be provided entire the car parking area as per I.S. 9972. Alarm Going to be incorporated along with the sprinkler system.

FIRE PUMP:

- 1. One no. Jokey pump(electric) capacity 180 LPM,
- 2. One no. Main pump capacity 2280 LPM.,
- 3. One no. Diesel driven Stand by pump of capacity 2280 LPM. And
- 4. One no. separate sprinkler pump of capacity 2280LPM. shall be installed and arranged in such a manner so that it will start automatically due to fall in pressure.

All the pump designed so as to supply water 900 LPM at a pressure of 3.5kg/cm2 at the furthest point. Only diesel driven arrangement for stand by fire pump shall be ensured.

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. All other requirements shall conforming I.S. 12469-1988.

REFUGE AREA:

- 1. The refuge area on calculating the area at the rate of 0.3 m2 / person on the basis of floor area but not less than 15 sq. mtr. each shall be provided on the external wall as cantilever projection or any other suitable floor levels of each building as shown shall be constructed.
- 2. The refuge areas shall be of fire resisting construction and protected with self-closing FCD at the entrance from the corridor or the staircase lobbies.
- 3. The position of refuge areas shall be such that they are negotiable by the fire service ladder from the ground floor level.

ELECTRICAL INSTALLATION AND DISTRIBUTION:

- 1. The electrical installation including Transformers, Switch Gear, 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.
- 2. The vertical and horizontal electrical ducts shall be sealed at each floor level by fire resisting materials.
- 3. The electrical installation shall be adequately protected with CO2/D.C.P. Fire Extinguishers conforming I.S. specification.
- 4. All electrical installation viz. Transformer, Switch Gear,LT/HT rooms shall be protected with both auto detection and suppression systems as per suitability.
- 5. For every 230V wiring above false cealing660 grade insulated cable shall be used Transformer Switch Gear H.T.,L.T. and others electrical rooms shall be at the ground floor level the other electric rooms shall be at least 4 hrs.fire resisting capacity adequate ventilation arrangement shall have to be made in all the rooms,Dry and explosion proof type Transformer shall be installed.

Alternative Power Supply:

Arrangement for alternative power supply shall have to be made to supply power with the help of a generator to operate at least the Fire Pump, Deep Tube-Well Pump, Fire Alarm System etc. and also for illuminating the Staircase, Corridors, Lobbies etc. and other places of assembly of the building in case of normal power failure.

AUTO DETECTION AND ALARM SYSTEM:

- 1. Auto Fire Detection System with the help of Heat and Smoke Detectors shall be installed in all places of below and preferably above false ceiling of the building. The system shall also be made in place of rooms where valuable articles have been kept. The other requirements of the system shall be made in accordance with I.S. specification.
- 2. The suppression system shall be made with Fire Extinguishers particularly in Computer, Electrical processing and Data Room and in all rooms of irreplaceable articles.
- 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.Part IV.

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. The Air Handling Units room shall not be used for storage of any combustible First Aid Fire Fighting arrangement in the style 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.

Small Gears: IS: 903-1993:-

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

FIRST AID FIRE FIGHTING SYSTEM:

First Aid Fire Fighting arrangement in the style 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.

- 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. Floor numbers and directional sign of escape route shall be displayed prominently.
- 4. The employees and security staffs shall be conversant with installed Fire Fighting Equipments of the building and to operate in the event of Fire and Testing.
- 5. 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.
- 6. A crew of 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 the building.
- 8. 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 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 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.

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Director

West Bengal Fire & Emergency Services