



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

Memo no.:FSR/0125186201103779

Date: 08-11-2020

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

To: MERLIN PROJECTS LIMITED
MOUZA CHAPNA, JL NO 35, RS/LR DAG NO 143P,144P,146,149,152P153TO157,258 TO 268,270,271,275,276,277,280
UNDER PATHARGHATA GRAM PANCHYAT,P.O. P.S. RAJARHAT, NORTH 24 PARGANAS, KOLKATA 700135

Sub: Fire Safety Recommendation for proposed construction comprising of 3nos block of B+G+XII storied (Block no. 1, 2 & 3A), 3nos block of G+XI storied (Block no. 3B , 3C & 3D) and 1no G+III storied Club (Block no. 4) under group Residential Building in the name of "Merlin Projects Limited" at Mouza- Chapna, JL No 35, RS/LR Dag No 143(P), 144(P), 146, 149, 152(P), 153 to 157, 258 to 268, 270, 271, 275, 276, 277, 280 under Patharghata Gram Panchyat, P.O. & P.S.- Rajarhat, North 24 Parganas, Kolkata 700135.

This is in reference to your application no. 0125186201103779 dated 26-09-2020 regarding the Fire Safety Recommendation for proposed construction comprising of 3nos block of B+G+XII storied (Block no. 1, 2 & 3A), 3nos block of G+XI storied (Block no. 3B , 3C & 3D) and 1no G+III storied Club (Block no. 4) under group Residential Building in the name of "Merlin Projects Limited" at Mouza- Chapna, JL No 35, RS/LR Dag No 143(P), 144(P), 146, 149, 152(P), 153 to 157, 258 to 268, 270, 271, 275, 276, 277, 280 under Patharghata Gram Panchyat, P.O. & P.S.- Rajarhat, North 24 Parganas, Kolkata 700135.

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 buildings shall be carried out as per approved plan drawings conforming the relevant buildings rules of local Municipal Body.
- 2.The interior finish decoration of the buildings 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 buildings 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 buildings 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.

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

C.STAIRCASE:

1.The staircase of the buildings 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 buildings shall have permanent vents at the top and open able sashes at each floor level in the external wall of the buildings.

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 buildings 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 Buildings as shown in plan drawings not less than 15 Sq. mtr. area at the level of 23.225 M, 38.475 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.BASEMENT:

1.Automatic Mechanical smoke venting arrangements shall be provided to the basement conforming the relevant I.S. Specification and provision of NBC Part IV, 2016.

2.Mechanical extractor shall have an alternate source of supply.

3.Mechanical extractor shall have an internal locking arrangement so that extracting shall continue to operate and supply fans shall stop automatically with the actuation of Fire Detectors / suitable detection system.

4.The entire basement shall be protected with Automatic Sprinkler System with Hydrants and Hose Reel Hose conforming relevant I.S. specification incorporating with alarm gong bell.

G.FIRE FIGHTING WATER :

Under Ground Water Reservoir of 150,000 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.

H.WATER LAYOUT SYSTEM:

1.The buildings 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. at the ground floor level outlet and minimum 900 ltrs/min. at the top most and farthest outlet. In both cases the running pressure shall not be less than 3.5 Kgs/Sq.cm. All other requirements shall be conforming I.S. 3844 – 1989.

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

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

I.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 buildings. 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.

J.Sprinkler Installation:

The automatic sprinkler installation shall be provided in entire both basements area and in all floor area of the Club House buildings and alarm gang to be incorporated along with the sprinkler system. Sprinkler test line shall have to be provided.

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 buildings 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 buildings incase of normal power failure.

L.DETECTION AND ALARM SYSTEM:

1.Manually operated Electrical Fire Alarm system with at least 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 buildings, other requirements of the system shall be made conforming I.S. 2189 – 1988.

2.Smoke / Heat detectors shall have to be provided in entire both basements area and in all floor area of the Club House buildings 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: i. 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.

M.FIRSTAID 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.

N.GENERAL RECOMMENDATIONS:

1.Fire Notice for Fire Fighting and evacuation from the buildings shall be prepared and be displayed at all vulnerable places of the buildings.

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 buildings 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 buildings to keep them in perfectly good working conditions at all times.
5. A crew of trained Fireman shall be maintained round the clock for safety of the buildings.
6. Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of buildings.
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 buildings.

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 buildings.

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

Director
West Bengal Fire & Emergency Services

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