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GOVERNMENT OF WEST BENGAL
Office of the Director General
West Bengal Fire & Emergency Services
13-D, Mirza Galib Street, Kolkata - 700 016.

Memo. No. : WBFES 4458 / 16 / Kol-RCB/ 577 /16 (577/16)

Date: 27/06/16

From : **The Director in Charge**
Fire Prevention Wing
West Bengal Fire & Emergency Services

To : **Trimurti High-Rise Pvt. Ltd.**
4A, Chaitan Sett Street,
Kolkata-700 007.



Sub : **Fire Safety Recommendation for Proposed Construction of B+VIII Storie Residential Cum Business Building at the Premises No.- 22, Hemanta Basu Sarani (Previously Known AS 5, Old Court House Street), Kolkata-7000 001, Ward No.-46 Borough No.-VI, Under K.M.C.**

This is in reference to your letter No. Nil, dated. Nil, regarding Fire Safety measure propose construction of B+VIII Storie Residential Cum Business Building at the Premises No.- 22, Hemanta Basu Sarani (Previously Known AS 5, Old Court House Street), Kolkata-7000 001, Ward No.-46 Borough No.-VI, Under K.M.C.

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 favour of the aforesaid building subject to the compliance of the following fire safety measure.

Enclose:

1. One set of plan.
2. Recommendation placed in this file.

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1. The whole construction of the proposed building shall be carried out as per approved plan draw conforming the relevant building rules of local Municipal Body.
2. The interior finish decoration of the building shall be made low flame spread materials conform L.S. specifications.
3. Arrangements shall have to made for sealing all the vertical ducts by the materials of adequate resisting capacity.
4. Provision of ventilation at the crown of the Central core-duct of the building shall be provided.

B. OPEN SPACE & APPROCH:

1. The open space surrounding the building shall conform the relevant building rules as well as per the accessibility and maneuverability of Fire appliance with turning facility.
2. The approach roads shall be sufficiently strong to withstand the load of Fire Engine Weighting up to 45 M.
3. The width and height of the access gates into the premises shall not less than 4.5 - 5 M respecting abutting road.

C. STAIRCASE :

1. The staircase of the building shall be enclosed type. Entire construction shall be made of bri 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 the each floor in the external wall of the building.
3. The width of the staircases 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 negotiable to each without entering into any room.
5. Fire and smoke doors at the entrances of all the staircase enclosures as marked in the plan at floor level shall be provided. The F.C.D. shall be of at least one hour Fire resisting wire glass with 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 hours Fire Resisting type.
2. Collapsible gate shall not be permitted.
3. One of the lifts shall be designed for Fire Lift. The word "FIRE LIFT" shall conspicuously be written on ground floor.



E. BASEMENT :

1. The basement shall be adequately ventilated.
2. Additional staircase from the open air as shown in the drawing shall be constructed beside the ramps conforming relevant I.S. Specification.
3. The basement shall be protected with hose reel system etc.
4. Mechanical extractor for Smoke Venting system from basement levels shall also be provided. The system shall be of such design as to operate on actuation of heat/smoke sensitive detector. It shall also have an arrangement to start it manually.
5. Mechanical extractors shall have an alternative source of supply.

F. FIRE FIGHTING WATER:

Underground water reservoir having water capacity of 50,000 Ltrs. and overhead reservoir of 10,000 Ltrs. capacity exclusively for Firefighting purpose with replenishing arrangements @ 1000 ltrs./hr preferably from two different sources of water supply shall be provided. The Water Reservoir 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.

G. HYDRANT SYSTEM:

1. The building shall be provided with Wet Riser of 150 mm internal diameter Pipe Line with provision of landing valves at the Staircase landings/half landings at the rate of one such riser for every 1000 Sq. m of floor area. The system shall be so designed that shall be kept charged with Water at all the time under pressure and capable to discharge 2850 ltrs/min at the ground floor level outlet and minimum 900 Ltrs/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 conforming I.S. 3844-1989.
2. Yard Hydrant with provision of adequate numbers Hydrant shall be installed surrounding the building in accordance with relevant I.S specification.

H. FIRE PUMP:

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.

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 be 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 Basement & all floor areas of the Building per I.S.9972. Alarm gang to be incorporated along with the sprinkler system.



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. The vertical and horizontal electrical sealed at each floor level by fire resisting material.
3. The electrical installation shall be adequately protected with CO₂/D.C.P.
4. Alternate 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 in case of normal power failure.

K. DETECTION AND ALARM SYSTEM:

1. Manually operated Electrical Fire Alarm system with at least three numbers of break glass type call boxes fitted with Hooters along with public address system, at each floor connecting with 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. Auto fire detection system with the help of heat and smoke detector shall be installed in all places of below and preferably above false ceiling of the building. The system shall also be made in places of rooms where valuable articles have been kept. The other requirements of the system shall be made in accordance with I.S 2189-1988.
3. The suppression system shall be made with Fire Extinguishers particularly in computer and electric processing and data room and in a room of irreplaceable articles.
4. Hooter will be sounded in such a manner so that an operation of a Detector or Manual Call Point Hooters will sounded on the same floor and immediate alternate floor.

L. AIR CONDITIONING SYSTEM:

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 location 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.



M. FIRST AID FIRE FIGHTING SYSTEM:

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

N. 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. Fire License shall have to be obtained for proposed storing and processing with L.P.G and highly combustible articles.
3. Floor numbers and directional sign of escape route shall be displayed prominently.
4. The employees and security staff shall be conversant with installed Fire Fighting equipment in 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 Safety installation and equipments installed in the building to keep them in perfectly good working conditions at all times.
6. A crew of trained firemen 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 occupants of building.
8. Each year 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 & 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 if 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.



Director in Charge
Fire Prevention Wing
West Bengal Fire & Emergency Services