

GOVERNMENT OF WEST BENGAL
OFFICE OF THE DIRECTOR GENERAL
WEST BENGAL FIRE & EMERGENCY SERVICES
13D, Mirza Galib Street, Kolkata - 700016

Memo No. WBFES/7301 /16 Kolkata-RB/1296/16

DATE:- 23/12/16

From : **The Director in Charge**
Fire Prevention Wing
West Bengal Fire & Emergency Services
To : Mr. Arun Sharma(Director)
M/S Goutam Construction Company Pvt. Ltd.
9/1, Old Post Office Street
Kolkata-700001

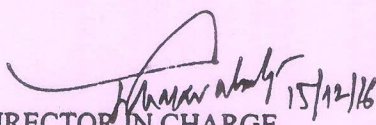


Sub : Fire Safety Recommendation for proposed construction of G+XII storied residential building, At the premises no- 24, Deodar Street, Ward No.- 069, Borough- VIII, Kolkata-700019.

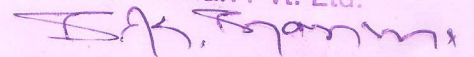
This is reference to your letter No. Nil dated 03.11.2016 regarding Fire Safety Measure of proposed G+XII storied residential building, At the premises no- 24, Deodar Street, Ward No.- 069, Borough- VIII, Kolkata-700019.

The plan drawing 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.

Encl :- 1. One set of plan
2.Recommendation


DIRECTOR IN CHARGE
FIRE PREVENTION WING
WEST BENGAL FIRE & EMERGENCY SERVICES

Ankur Nirman Pvt. Ltd.



Director

RECOMMENDATION

A. CONSTRUCTION:

- 1) Materials for rapid flame spread categories including untreated wood Fiber Board etc. shall be not use. The doors and windows preferably shall be made of metal.
- 2) The interior finish decoration shall be made with the materials of low flame spread and low smoke and Toxic Gas generating categories conforming I.S specification.
- 3) Arrangement shall be made for sealing all the vertical service ducts by the materials of adequate Fire resisting capacity.

B. OPEN SPACE AND APPROACH ROAD:

- 1) The open space surrounding the building shall be kept clear open to sky and shall conform the relevant building rules as well as permit the easy accessibility and maneuverability of the Fire appliances with turning facility.
- 2) The approach road and roads surrounding the building shall be sufficient strong to withstand the load of the Fire Engine weighting 40 M.T.
- 3) The width and height of the entry gate of the premises shall not be less than 4.5M and 5M respectively.
- 4) Car Parking will not be allowed on the Drive Way.

C. STAIRCASE:

- 1) The staircases 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 hrs.
- 2) The Staircase shall have permanent vents at the top and open able sashes at each floor level in the external wall of the building.
- 3) All staircases shall be extended up to terrace and shall be negotiable to each other without entering into any room.
- 4) The width of the Staircases shall be as marked in the plan all corridors shall be as marked in the plan.
- 5) Fire and smoke doors at the entrances of all the staircase enclosures 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 open able in the direction of escape.

D. LIFT:

- 1) The walls of the Lift enclosures of the building shall be at least 4 Hrs. Fire resisting type. Collapsible gate shall not be permitted.
 - 2) The Electric 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 24 Volts, supply on emergency in case of failure of normal power supply, lift shall automatically trip over alternate power supply.
 - 3) Exit doors of the lift lobby shall be through a self-closing smoke stop floor of 1 hr. Fire resistance.
- All other requirements shall confirm the I.S specifications including the communication facility in the liftcars.

E. REFUGE AREA :

- 1) Refuge area is not less than 15 sq.m shall be provided on the external wall with cantilever projection or other suitable means at 24.167mtr. Level of the building as shown in the drawing.
- 2) The refuge area shall be of fire resisting construction and protected with self closing F.C.D at the entrance from corridor or the stair case lobbies.
- 3) The position of refuge area shall be such that they are negotiable by the fire service ladder from the ground.

Ankur Nirman Pvt. Ltd.

[Signature]

Director

F. FIRE FIGHTING WATER:

- 1) Under ground water reservoir having water capacity of 150000 Liters overhead water reservoir of 10000 Liters capacity exclusively for firefighting purpose with replenishing arrangement @ 1000 liters/min. preferably from two different sources of water supply shall be provided. The fire 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. HYDRENT SYSTEM&PUMP:

- 1) The building shall be provided with wet riser of 150 mm internal diameter pipe line with provision of landing valves at the staircase landing/half landing 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 2850 liters/min at the ground floor level outlet and minimum 900 liters/min at the top most outlets. In all cases the running pressure shall not be less than 3.5 kg/cm². All other requirements shall be in confirming with I.S. 3844-1989.
- 2) Provision of hose reel in conjunction with wet riser shall be made at each floor level. Confirming the relevant I.S specification.
- 3) Yard hydrant /Ring main hydrant with provision of adequate numbers hydrant shall be installed surrounding the building in accordance with relevant I.S specification.
- 4) Provision of Fire Service inlet should be there to inject water into the installed wet riser at down corner from external source during emergency basis.

H. SPRINKLER INSTALLATION

The automatic Sprinkler installation shall be provided all the assembly area on the 1st floor area as per I.S 9972 alarm gang to be incorporated along with the sprinkler system.



Pump :-Provision of 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 of positive type or in case of negative the system shall be connected to down corner of overhead tank through suitable terrace level pump.

I. ELECTRICAL DISTRIBUTION SYSTEM:

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/DCP extinguisher.
3. Electrical distribution systems of the buildings shall be made in the form of concealed wiring or in heavy gang M.S. conducted continuously bonded to earth. cables shall be I.S. marked and preferably be F.R.L.S. categories
4. Alternative power supply,Arrangement shall have to be made to supply power with the help of a Generator to operate the fire pump, pump for deep tube well, Fire alarm system etc. and also for illumination for staircase, corridors etc. and other places of assembly of the building in case of normal power failure.

J. DETECTION AND ALARM SYSTEM :

- 1) Manually operated electrical Fire alarm system with adequate numbers of break glass type call boxes in each floor fitted with hooters along with public address system, connecting with visual panel board shall be made in control room. The control room shall be located at the entrance of the ground floor, other requirement of the system shall be made confirming I.S. 2189 - 1988 .
- 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.
- 3) Auto Fire detection system with the help of Heat and Smoke detector shall be installed in accordance with I.S. Specification 2189 - 1988.

Ankur Nirman Pvt. Ltd.

(Signature)

Director

K. AIR CONDITIONING SYSTEM (if any):

- 1) The system of auto shut down of A.H.U shall be incorporated with the auto detection and alarm system.
- 2) The Air handling unit's room shall not be used for storage of any combustible materials.

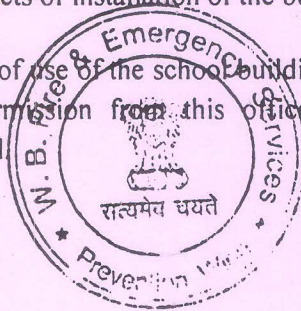
L. FIRST AID FIRE FIGHTING: First Aid firefighting arrangements in the style of placing suitable categories of portable Fire Extinguishers I.S.I Mark Fire Buckets etc. on all floors and at all vulnerable locations of the premises shall be made in accordance with I.S. specification 2190-1992.

M. GENERAL RECOMMENDATIONS:

- 1) Fire License shall have to be obtained for proposed storing and processing with LPG and other highly combustible articles. Adequate Fire Mask to be provided
- 2) Provision of emergency illuminating of exits shall also be made at all floor levels of building confirming the I.S specification.
- 3) Arrangement shall be made for regular checking and testing and proper maintenance of all the Fire Safety installations, equipment's and means of escapes installed in the building to keep them in perfectly good working conditions at all the time by authorized competent agency in this regard.
- 4) The occupants, employees and the security staff shall know how to operate the first aid firefighting equipment's and systems installed in the building.
- 5) Practice of Fire and Evacuation drills shall be arranged at regular interval of time involving all the occupants and security staff shall be recorded.
- 6) Floor numbers and directional sign of escape route shall be displayed prominently.
- 7) Good Housekeeping should be maintained always.

On compliance of all above Fire and Life safety recommendations, the Director General, West Bengal Fire & Emergency Services, shall be approach for necessary inspection and testing of the installation, Fire Safety Certificate. In favour of the occupancy shall be issued on being satisfied with tests and performances of safety aspects of installation of the building.

N.B. Any deviation and changes in the nature of use of the school building in respect of the Approved plan drawing. Without obtaining prior permission from this office, this Fire and Life Safety Recommendations will be treated as cancelled



Ankur Nirman 15/12/16
DIRECTOR IN CHARGE
FIRE PREVENTION WING

WEST BENGAL FIRE & EMERGENCY SERVICES

Ankur Nirman Pvt. Ltd.

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Director