

**GOVERNMENT OF WEST BENGAL  
OFFICE OF THE DIRECTOR GENERAL  
WEST BENGAL FIRE & EMERGENCY SERVICES  
13-D Mirza Ghalib Street, Kolkata- 700 016**

Memo No : IND/WB/FES/20182019/21559

DATE: 18/08/2018

**From :**

**The Director**

**Fire Prevention Wing,**

**West Bengal Fire & Emergency Services.**

**To :**

**Manish Todi and Others**

**177, Purbapara, Ward No.-29, Khatian No.-113, Dag-645, J.L. No.-57, Mouza-Laskarpur,  
P.S.-Sonarpur, Dist.-24Pgs (S) Under Rajpur Sonarpur Municipality  
Baruipur F.S., Sonapur,  
South 24 Parganas - 700084 .**

**Sub :Fire Safety Recommendation for a proposed construction of B + G + VI storied building under group Residential at the premises No.- 177, Purbapara, Ward No.-29, Khatian No.-113, Dag-645, J.L. No.-57, Mouza-Laskarpur, P.S.-Sonarpur, Under Rajpur Sonarpur Municipality, South 24 Parganas.**

This is in reference to your Application No. IND/WB/FES/20182019/21559,dated 18/08/2018, regarding the Fire Safety Measure for a proposed construction of B + G + VI storied building under group Residential at the premises No.- 177, Purbapara, Ward No.-29, Khatian No.- 113, Dag-645, J.L. No.-57, Mouza-Laskarpur, P.S.-Sonarpur, Under Rajpur Sonarpur Municipality, South 24 Parganas..

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

Recommendation:

1. A. CONSTRUCTION:

- a)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.
- b)The interior finish decoration of the building shall be made low flame spread materials conforming I.S. specifications.
- c)Arrangements shall have to made for sealing all the vertical ducts by the materials of adequate Fire resisting capacity.

#### B. OPEN SPACE & APPROCH:

- a)The open space surrounding the building shall conform the relevant building rules.
- b)The approach roads shall be sufficiently strong to withstand the load of Fire Engine Weighting up to 45 M.T.
- c)The entrance and the exit gate shell have to be provided as per relevant building rules of the local municipal corporation and as show ad marked in the plan.

#### C. STAIRCASE :

- a)The Staircase of the building shall have permanent vents at the top and openable sashes at the each floor level in the external wall of the building.
- b)The width of the staircases shall be made as marked in the plan. Corridors and the exit doors shall conforming the relevant building rules with up-to-date amendments.
- c)The staircase shall be extended up to terrace of the building and shall be negotiable to each other without entering into any room.
- d)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 two hour fire resisting wire glass window flitted with self-closing type open able in the direction of escape.

#### D. LIFT:

- a)The walls of the lift enclosure shall be at least two hours Fire Resisting type.
- b)Collapsible gate shall not be permitted.
- c)The existing lifts will be treated as Fire Lift in case of emergency. The word "FIRE LIFT" shall conspicuously be written at ground floor.

#### E. BASEMENT:

- a) The Basement shall be adequately ventilated with aggregate cross sectional area of not less than 2.5% of the area spread evenly round the perimeter of the basement shall be provided in the form of grills.
- b)Mechanical smoke venting arrangements shall be provided to all the basements conforming the I.S. Specification.
- c)The exit from the basement shall be from open Air and from any points the travel distance shall not exceeds 18.5 M to reach any exit.
- d)All the basement shall be protected with Automatic Sprinkler System conforming to I.S.3844-1989.

- e) Mechanical extractors shall have an alternative source of supply.
- f) 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.
- g) Mechanical extractors shall be designed to permit 30 Air changes per hour in case of Fire or distress call

#### F. FIRE FIGHTING WATER:

The underground reservoir of 50,000 Lts. Capacity and exclusively for Firefighting purpose with replenishing arrangements @ 1000 lts./min 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:

a) The building shall be provided with Wet Riser at 150mm. internal diameter Pipe Line 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 lts/min. at the ground floor level outlet and minimum 900lts/min. at the top most outlet. In both cases the running pressure shall not be less than 3.5Kgs/Sq.cm. All other requirements shall conforming I.S. 3844 – 1989.

b) Provision for Hose Reel in conjunction with Wet Riser shall be made at each floor level. Conforming the relevant I. S. Specifications.

c) Yard Hydrant / Ring Main Hydrant with provision of four numbers Hydrant shall be installed surrounding the building in accordance with relevant I.S. specifications.

#### Automatic Sprinkler Installation:

All the basement area and all the assembly area in the residential section as well as in the entire commercial area shall be protected by automatic Sprinkler installation conforming the grade as per I.S. Specification.

#### H. FIRE PUMP :

a) 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.

b) 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. A separate pump for the sprinkler installation shall preferably be provided.

#### I.ELECTRICAL INSTALLATION & DISTRIBUTION:

a)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.

b)The vertical and horizontal electrical sealed at each floor level by fire resisting material.

c)The electrical installation shall be adequately protected with CO2/D.C.P.

d)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.

#### J. DETECTION AND ALARM SYSTEM :

1. Addressable analogue manual call boxes incorporating with sounders shall be installed in all the floor area of the building in such a manner that maximum travel distance shall not be more than 22.5m in order to reach any of the call point.

2. Both way Public address system linked between all floors and Control Room shall have to be established.

3. All the installation shall also satisfy the IS. Specification 2189 as amended and the code of practice as laid down in N.B.C. pt. IV 2016.

#### K.FIRST AID FIRE FIGHTING SYSTEM:

First Aid Fire fighting arrangement in the style of placing suitable type 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.

Special rescue equipment like Smoke Hood, self contained B.A. set portable lights at least two pairs (4sets) shall be made available in the main fire Control Room of the premises.

#### L.GENERAL RECOMMENDATIONS:

a)Fire Notice for Fire Fighting and evacuation from the building shall be prepared and be displayed at all vulnerable places of the building.

b)Floor numbers and directional sign of escape route shall be displayed prominently.

c)The employees and security staff shall be conversant with installed Fire Fighting

equipments of the building and to operate in the event of Fire and Testing.

d)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.

e)Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of building.

f)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.

g)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 drawing, without obtaining prior permission from this office, this Fire Safety Recommendation will be treated as cancelled.

**Director**  
**West Bengal Fire & Emergency Services**