

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

Memo No. : WBFES / 7516 / 16 / Kol -RB / 1180 / 16 (1180 / 16)

Date : 30/12/16

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

**To :**  
Arya Sumant  
Managing Director  
Eden Realty Ventures Pvt. Ltd.  
Metropolitan Building  
7 J.L. Nehru Road  
Kolkata-700013



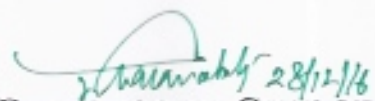
**Sub: Fire Safety Recommendation for a proposed construction of G+XII storied Residential building at Premises No- 561, Bonhooghly arable land ( popularly known as Baranagar tenement scheme), R.S. Plot No-38 ( full), Khatian No- (L.R.)2 & R.S. Plot No-38/224 (part-western portion), Khatian No-819 ( modified), J.L. No-07, Mouza- Palpara, Holding No- .4, Ward No-.15, P.S.- Baranagar, Kolkata-700108.**

This is in reference to your letter dated 26.10.2016 regarding **Fire Safety Recommendation** for a proposed construction of G+XII storied Residential building at Premises No- 561, Bonhooghly arable land ( popularly known as Baranagar tenement scheme), R.S. Plot No-38 ( full), Khatian No- (L.R.)2 & R.S. Plot No-38/224 (part-western portion), Khatian No-819 ( modified), J.L. No-07, Mouza- Palpara, Holding No- .4, Ward No-.15, P.S.- Baranagar, Kolkata-700108.

The plan drawings submitted by you was scrutinised 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 measures.

**Enclo:**

- 1) Recommendation
- 2) One set of plan

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

## **RECOMMENDATIONS**

### **A. CONSTRUCTION :**

- 1) The whole construction of the existing building shall be carried out as per approved plan drawings conforming the relevant building rules of West Bengal Municipal Building Rules.
- 2) The interior finish decoration of the building shall be made low flame spread materials conforming I.S. specification.
- 3) Provision of ventilation at the crown of the central core duct of the building 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.

### **B. OPEN SPACE & APPROACH :**

- 1) The open space 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 up to 45 M.T.
- 3) The width and height of the access gates into the premises shall not be less than 5 meter and 5 meter respecting abutting the road.

### **C. 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 2 hours.
- 2) The staircase of the building shall have permanent vents at the top and openable sashes at each floor level 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 conforming the relevant building rules with up to date amendments.
- 4) All the staircases shall be extended up to terrace of the building and shall be negotiable to each other through a connecting Corridor or Lobby.
- 5) Fire and smoke doors at the entrances of all the staircase enclosure 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.

### **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 lift shall be designed for fire lift. The word "FIRE LIFT" shall be conspicuously written at ground floor.

### **E. REFUGE AREA :**

- 1) Refuge area is not less than 15 sq meters shall be provided on the external wall with cantilever projection or other suitable means at 8<sup>th</sup> floor level(3 Nos) & in between 8<sup>th</sup> & 9<sup>th</sup> floor level(1 No) of the building as shown/ marked in the plan drawing.
- 2) The refuge area shall be of RCC 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 level.





#### **F. FIRE FIGHTING WATER:**

Under ground water reservoir water capacity at 75,000 Ltr. capacity overhead reservoir of 10,000X 2= 20,000 Ltr. capacity exclusively for fire fighting purpose & shall be connected with Wet Riser System by means of Gate Valve with replenishing arrangements @ 1,000 L.P.M. 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. 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 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 L.P.M. at the ground floor level outlet and minimum 900 L.P.M. at the top most outlet. In both cases the running pressure shall not be less than 3.5 kg/sq.cm. All other requirements shall conform I.S. 3844-1989.
- 2) Provision for 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 three way collecting head for uses of Fire services must be provided at the entrance of the building.



#### **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. Fire 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.

#### **I. 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. 1946-1982.
- 2) The vertical & horizontal ducts shall be sealed at each floor level by fire resisting material.
- 3) The electrical installation shall be adequately protected with CO<sub>2</sub>/ D.C.P. extinguishers.
- 4) **Alternative power supply** - arrangements shall have to made to supply with the help of a generator to operate at least the Fire Pumps, Pump for deep tube well, Fire Alarm System, Fire Lift etc. and also for illuminating the staircase, corridors etc. and other places of assembly of the building incase of normal power failure.

#### **J. DETECTION, ALARM AND SUPPRESSION 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 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 building, other requirements of the system shall be made conforming I.S. 2189-1988.

- 2) The suppression system shall be made with Fire Extinguishers particularly in computer and Electrical processing and data room and in a room of irreplaceable articles.
- 3) 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 and immediate alternate floor.
- 4) Public Address System: The system shall be linked between all floors and Control Room.

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

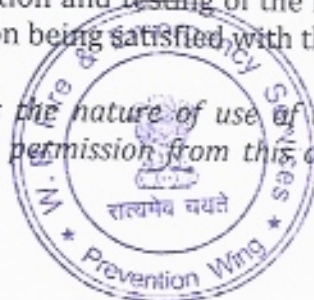
First Aid Fire fighting arrangements in the style of placing suitable type of portable fire extinguishers, fire buckets etc. in all floors and vulnerable locations of the premises shall be made in accordance with I.S.2190-1992

**L. GENERAL RECOMMENDATIONS :**

- 1) Fire License shall have to be obtained from the License section of the Department for proposed storing of highly combustible articles and processing with L.P.G, which come under the per view of License Section.
- 2) Fire Notice for fire fighting and evacuation from the building shall be prepared and be displayed at a vulnerable places of the building.
- 3) Floor numbers and directional sign of escape routes shall be displayed prominently within the vicinity of the occupants.
- 4) The employees and security staff shall be conversant with installed fire fighting equipments of the building and to operate in the event of Fire & Testing.
- 5) Arrangement shall be made 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 under the experienced officer 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) 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.

This shall be treated as **Fire Safety Recommendation** 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.*



*Signature*  
**DIRECTOR-IN-CHARGE**  
**FIRE PREVENTION WING**  
**WEST BENGAL FIRE & EMERGENCY SERVICES**