

**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/20192020/57575

DATE: 24/09/2019

**From :**

**The Director  
Fire Prevention Wing,  
West Bengal Fire & Emergency Services.**

**To :**

**KHAITAN CONSTRUCTION LLP  
J.L. NO.-75,  
MOUZA-DHAMAITALA, HOLDING NO-1583, DARIR  
ROAD ,WARD NO-25, POLICE STATION-  
SONARPUR, DISTRICT- 24 PARGANAS (SOUTH),  
UNDER RAJPUR SONARPUR MUNICIPALITY  
Baruipur F.S., sonarpur,  
South 24 Parganas - 700151 .**

**Sub :Fire Safety Recommendation for proposed two nos. G+XII storied under group Residential Building at the premises no. J.L. NO.-75, MOUZA-DHAMAITALA, HOLDING NO-1583, DARIR ROAD,WARD NO-25, POLICE STATION- SONARPUR, DISTRICT- 24 PARGANAS (SOUTH), UNDER RAJPUR SONARPUR MUNICIPALITY,**

This is in reference to your Application No. IND/WB/FES/20192020/57575,dated 24/09/2019, regarding the Fire Safety Measure for proposed two nos. G+XII storied under group Residential Building at the premises no. J.L. NO.-75, MOUZA-DHAMAITALA, HOLDING NO-1583, DARIR ROAD,WARD NO-25, POLICE STATION- SONARPUR, DISTRICT- 24 PARGANAS (SOUTH), UNDER RAJPUR SONARPUR MUNICIPALITY,

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. CONSTRUCTION:

- 1.The whole construction of the existing building shall be carried out as per approved plan drawings conforming the relevant building rules of local Municipality Body.
- 2.The floor area exceeds 750 m<sup>2</sup> shall be suitably compartmented by separation walls up to ceiling level having two hours fire resisting capacity.
- 3.The interior finish decoration of the building shall be made low flame spread materials conforming I.S. specifications.
- 4.Provision of ventilation at the crown of the central core-duct of the building shall be provided.
- 5.Arrangement shall have to be made for sealing all the vertical and horizontal ducts by the materials of adequate fire resisting capacity.

#### OPEN SPACE AND APPROACH:

- 1.The open spaces 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 45M.T.
- 3.The width and height of the access gate into the premises shall not be less than 4.5 mts. and 5.0 mts. respecting the abutting road.
- 4.Drive way should be free from any type of obstruction. No parking will be allowed on the drive way.
- 5.All the Passage way should be kept clear for free access.

#### 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 4 hours.
- 2.The staircase of the building shall have permanent vents at the top and openable sashes at each floor level in the external walls of the building.
- 3.The width of the staircase 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 at each floor.

5.Fire check doors of at least 2 hours 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 one hour Fire Resisting wire glass window fitted with self-closing type openable in the direction of escape.

#### REFUGE AREA:

1.Refuge area is not less than 15 sq. m. and shall be provided on the external wall with cantilever projection or other suitable means at the levels of the buildings as shown in the drawings.

2.The refuge areas shall be of Fire Resisting construction and protected with self-closing F.C.D. at the entrance from the corridors at staircase lobbies.

3.The position of refuge areas shall be such so that they are negotiable by the Fire Service Ladder from the ground level.

#### FIRE FIGHTING WATER:

Underground water reservoir having water capacity of 100000 ltrs. and overhead water reservoir having capacity of 5000 ltrs. For each block exclusively for fire fighting purpose with replenishing arrangements @ 1000 ltrs/min. preferably from two different sources of water supply shall be provided. The water reservoirs 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.

#### 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 sqm. 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 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/sq.cm. All other requirements shall conforming I.S. 3844-1989.

2.Provision for Hose Reel in conjunction with Wet Riser shall be made at each floor level and conforming the relevant I.S. Specifications.

#### 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 building. One such pump shall always be kept on stand-by preferably be of diesel driven type.

2.Provision of the Jockey Pump shall also have to be made to keep the water based system under pressurized condition 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.

#### ELECTRICAL INSTALLATION AND DISTRIBUTION:

- 1.The electrical installation including Transformers, Switch Gear, 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 ducts shall be sealed at each floor level by fire resisting materials.
- 3.The electrical installation shall be adequately protected with CO2/D.C.P. Fire Extinguishers conforming I.S. specification.
- 4.Arrangement for alternative power supply shall have to be made to supply power with the help of a generator to operate at least the Fire Pump, Deep Tube-Well Pump, Fire Alarm System etc. and also for illuminating the Staircase, Corridors, Lobbies etc. and other places of assembly of the building in case of normal power failure.

#### DETECTION AND ALARM SYSTEM:

- 1.Manually operated Electrical Fire Alarm System with at least two numbers of break glass type manual call point 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 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 Smoke Detectors shall be installed in all places of below and preferably above false ceiling of the building. The system shall also be made in place 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.Hooters will be sounded in such a manner so that an operation of a Detectors or Manual Call Point. Hooters will be sounded on the same floor and immediate alternate floor.

#### AIR CONDITIONING SYSTEM ( If any ):

- 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 locations 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 First Aid Fire

Fighting arrangement in the style 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.

**GENERAL RECOMMENDATIONS:**

- 1.Fire License shall have to be obtained for proposed storing and processing with L.P.G. and other highly combustible articles.
- 2.Portable Fire extinguishers as per suitability to be installed at strategic location covering all floor area as per relevant IS specification.
- 3.Fire Notice for Fire Fighting and evacuation from the building shall be prepared and be displayed at all vulnerable places of the building.
- 4.Floor numbers and directional sign of escape route shall be displayed prominently.
- 5.The employees and security staffs shall be conversant with installed Fire Fighting Equipments of the building and to operate in the event of Fire and Testing.
- 6.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.
- 7.A crew of trained Fireman under the experienced Fire Officer shall be maintained round the clock for safety of the building.
- 8.Mock Fire practice and Evacuation Drill shall be performed periodically with participation of all occupants of the building.

On compliance of all the above Life and Fire Safety Recommendation, the Director General, West Bengal Fire & Emergency Services shall be approved for necessary inspection and testing of all 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**

Signature Not Verified  
Digitally signed by TARUN  
KUMAR SINHA  
Date: 2019.09.24 17:57:23 IST