

Government of West Bengal
Office of the Divisional Fire Officer
Howrah Division
West Bengal Fire & Emergency Services
430 G.T. Road (N), Howrah-1

Memo no- WBFES/D.O., Howrah / FP/ 259 / 17 /How/ R.B./ 10 /17 Date 09/10/17

From : The Divisional Fire Officer, Howrah Division,
West Bengal Fire & Emergency Services.

To : The Director,
The Hanuman Estates Limited,
8, B.B.Bagh East,
Kolkata-1



Sub: Fire safety recommendations for proposed construction of G+IV storied comprising 07 nos block – Block- A to G & one no G+III storied as block –H under group Residential building in a complex at the premises at L.R. Dag no.- 649 & 651, L.R. Khatian No- 2134 , Mouza- Podrah , J.L. No.- 38 , P.S.- Sankrail, Dist.- Howrah.

This is in reference to your letter No nil dated 06/04/17 regarding Fire Safety measures of proposed construction of G+IV storied comprising 07 nos block – Block- A to G & one no G+III storied as block –H under group Residential building in a complex at the premises at L.R. Dag no.- 649 & 651, L.R. Khatian No- 2134 , Mouza- Podrah , J.L. No.- 38 , P.S.- Sankrail, Dist.- Howrah.

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 recommendations, this office issuing Fire Safety Recommendation in favour of the aforesaid buildings subject to compliance of the following fire safety measures.

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09/10/17

Divisional Fire Officer
Howrah Division
West Bengal Fire & Emergency Services.

Encl :

1. One set of plan.
2. Recommendation



RECOMMENDATIONS

A. CONSTRUCTION

1. The whole construction of proposed buildings shall be carried out as per approved plan drawings conforming the relevant building rules of local Municipality / Panchayet Body .
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 ducts by the Fire resisting materials .

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. Minimum 4 M wide drive way along with circulation space shall be provided covering all blocks.
3. The approach roads shall be sufficiently strong to withstand the load of fire engine weighting up to 45 M.T.

C STAIRCASE

1. 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 of the building shall have permanent vents at the top and operable 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 conform the relevant building rules to up to date amendments.
4. All staircases shall be extended up to terrace of the building and shall be negotiable to each other without entering into any room.
5. 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 one hour Fire Resisting wire glass window fitted with self closing type openable in the direction of escape

D. LIFT

1. The lift well shall be at least two hours fire resisting type. Motor room shall be at the top of the lift shaft by the floor of the room. Enclosure landing doors shall be of one hour fire resistance rating and shall have self closing door.
2. Collapsible Gate shall not be permitted.

E FIRE FIGHTING WATER:

1. Underground water reservoir having water capacity at 2,00,000 ltrs. shall be provided exclusively for Fire fighting purpose with replenishing arrangements @ 1000lts./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.



F. HYDRANT SYSTEM:

1. Each building (Block) shall be provided with Wet Riser of 100mm internal diameter pipe line with provision of landing valves at the each Staircase landings/half landings at the rate of one such riser for 1000 Sq m of floor area. The system shall be so designed a that shall be kept charged with Water all the time under pressure and capable to discharge 2850 lts /min at the ground floor level outlet and minimum 900 lts/min at the top most outlet. in both case the running pressure shall not be less than 3.5kgs/ 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. Conforming the relevant I.S. Specifications.
3. Yard Hydrant /Ring Main Hydrant of 150 M internal dia Pipe with provision of adequate numbers of Hydrant shall be installed surrounding the complex covering all blocks in accordance with relevant I.S. specification.

G. 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 of positive type or in case of negative section the system shall be Wet Riser-cum-Down comer with suitable terrace pump with overhead tank.

H. SPRINKLER INSTALLATION:

The automatic Sprinkler installation shall be provided in all ground floor mercantile areas of Block A , B, C, as per I.S. 9972. Alarm gang to be incorporated along with the sprinkler system.

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. specification 1946-1982.
2. The vertical ducts shall be supply sealed at each floor level.
3. The electrical installation shall be adequate protected with Detectors & CO₂/D.C.P. extinguishers

4. Alternative 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, ALARM SYSTEM:

1. Manually operated Electrical Fire Alarm system with 02 numbers of break glass type call boxes fitted with Hooters 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. 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 mercantile floor areas of block A,B,C, and as and where required. 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. Hooter will be sounded in such a manner so that Hooters will sounder on the same floor and immediate alternate floor.

L. FIRST AID FIRE FIGHTING SYSTEM

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

M. GENERAL RECOMMENDATION:

1. Fire License shall have to be obtained for proposed storing and processing with LPG & highly combustible articles.
2. Fire Notice for Fire Fighting and evacuation from the building shall be prepared and be displayed at all vulnerable places of the building.
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 equipments of the building and to operate in the event of Fire and testing.
5. Arrangement shall be made for regular checking, testing and 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 building.

On compliance of all 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 and Life safety recommendations will be treated as cancelled.

D. Howrah
09/10/12

Divisional Fire officer
Howrah Division
West Bengal Fire & Emergency Services