

GOVERNMENT OF WEST BENGAL
Office of the Director General
West Bengal Fire & Emergency Services
13-D, Mirza Galib Street, Kolkata – 700 016.

Memo. No : WB FES 8340 / 15 / Burdwan-RCB/158/15(158/15) Date: ... 22. / 11 / 15

From : The Director
Fire Prevention Wing
West Bengal Fire & Emergency Services.

To : Smt. Sunita Bhatia & Ors.
Keshabganj
P.S. & Dist.-Burdwan
Pin-713 101.



Sub : Fire Safety recommendation for Proposed construction of B+G+VII storied under group Residential Cum Commercial Building at premises No.-R.S. Plot No-566,567/970. L.R. Plot No.-1010,1011. R.S. K.H. No. 696,749. L.R. K.H. No. 4572,10823,15934. Ward No.-01, Holding No.-641. At Mahalla:- Keshabganj, P.S. & Dist.-Burdwan. Under Burdwan Municipality.

This is in reference to your letter No. Nil, dated. Nil, regarding Fire Safety measure proposed construction of B+G+VII storied under group Residential Cum Commercial Building at premises No.-R.S. Plot No-566,567/970. L.R. Plot No.-1010,1011. R.S. K.H. No. 696,749. L.R. K.H. No. 4572,10823,15934. Ward No.-01, Holding No.-641. At Mahalla:-Keshabganj, P.S. & Dist.-Burdwan. Under Burdwan 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 office is issuing **Fire Safety Recommendation** in favour of the aforesaid building subject to the compliance of the following fire safety measure.

Enclose:

1. One set of plan.
2. Recommendation placed in this file.


Director

Fire Prevention Wing
West Bengal Fire & Emergency Services

RECOMMENDATION

A. As the Building will be high rise (24M in height), The follow safety measure shall be provided during construction:-

1. A water storage tank of minimum 20,000 lts. Capacity which may be used for other construction purpose as well as fire fighting purpose also shall be provided.

B. CONSTRUCTION:

1. 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.
2. The interior finish decoration of the building shall be made low flame spread materials conforming L.S. specifications.
3. Provision of ventilation at the crown of the Central core-duct of the building shall be provided.

C. OPEN SPACE & APPROCH:

1. The open space surrounding the building shall conform the relevant building rules as well as permit the accessibility and maneuverability of Fire appliance 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 less than 4.5 - 5 M respecting abutting the road.

D. 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 wall of the building.
3. The width trend, riser, flight of the stair cases, corridors and the exit doors corridor, passage way, lobby etc. shall conforming the relevant building rules with up to date amendments.
4. All the staircase 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 open able in the direction of escape.

E. BASEMENT :

1. The automatic sprinkler installation shall be provided in Basement areas & commercial area of the Building as per I.S. 1972. Alarm to be incorporated along with the sprinkler system.
2. One ramps additional staircase for open air shall be constructed beside the rams.
3. The basement shall be adequately ventilated

At the periphery of the Basement, at least two hours fire resistant shall be constructed. The entry of such staircase shall be made at ground level only from open air and in such position that smoke from any fire in the basement shall not obstruct any exit serving upper floors of the building.

5. Adequate means of escape from the underground structures shall be provided in accordance with relevant codes and I.S. Specification.

6. Automatic Mechanical extractor for Smoke Venting system from basement levels shall also be provided. The system shall be of such design as to operate on actuation of heat/smoke sensitive detector or sprinkling. It shall also have an arrangement to start it manually.

F. LIFT:

1. One of the lift shall be designed for Fire Lift. The word "FIRE LIFT" shall conspicuously written at ground floor.

2. The walls of the lift enclosure shall be at least two hours fire resisting type collapsible gate shall not be permitted.

3. All other requirements in this regard shall conform the sec. 5 of part VIII of N.B.C. of India, 2005.

G. FIRE FIGHTING WATER:

Underground water reservoir having water capacity of 50,000 Ltrs. and overhead reservoir of 5,000 Ltrs. capacity 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.

H. HYDRANT SYSTEM:

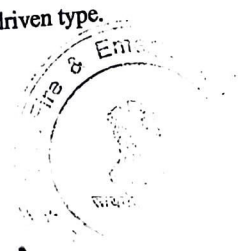
1. Provision for Hose Reel in conjunction with Wet Riser-cum-down comer of 100mm dia having landing valve at each floor level connected to overhead reservoir through pump of 1200LPM shall be made Conforming the relevant I. S. Specifications.

2. The building shall be provided with Wet Riser at 100mm. 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 1680 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.

3. Yard Hydrant/Ring Main Hydrant with provision of adequate numbers Hydrant with one number of fire service inlet shall be installed the building in accordance with relevant LS specification.

I. FIRE PUMP:

Provision of the Fire Pump shall have to be made to supply water at the rate-designed pressure and discharge into the Mator based system, which shall be installed in the building. One such pump shall always be kept on stand-by 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 Pump shall preferably of positive type

J. 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 alternative floor level.
3. The electrical installation shall be adequately protected with CO₂/D.C.P. or medium velocity / projector system.
4. 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.

K. DETECTION AND ALARM SYSTEM:

1. Auto fire detection system shall be provided in the Basement as per I.S. specification. Manually operated Electrical Fire Alarm system with at least three numbers of break glass type call boxes 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 the entrance of Ground Floor of the building, other requirements of the system shall be made conforming I.S 2189-1988.

L. 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 location 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 materials.
5. All other requirements in this regard shall be provided as per N.B.C. of India 2005 laid down under sec. 3 of part VIII.

M. 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.

N. GENERAL RECOMMENDATIONS:

1. Fire Notice for Fire Fighting and evacuation from the building shall be prepared and be displayed at all vulnerable places of the building.
2. Floor numbers and directional sign of escape route shall be displayed prominently.

3. 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.
4. 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.
5. A crew of trained firemen shall be maintained round the clock for safety of the building.
6. Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of building.
7. After completion of the total construction work and installation of total Fire Safety measure of the Building, a letter of information must be communicated to this office for further inspection to issue the FSC of the Building if satisfied by the inspecting authority if this Department.
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.
9. Any changes/Deviation the nature of use group of the building other the approved plan drawings shall not be permitted without prior permission from this office.
10. To eliminate Fire Hazardous, good housekeeping both inside and outside the building shall be strictly maintained by the occupants/ or the owner of the Building.
11. The lighting protection for the Buildings shall be provided under sec. 2 of part VIII "Building Services" of N.B.C of India 2005.
12. Green view concept of the Building and premises may be provided with water body, roof garden, wind flowers etc.

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

**Fire Prevention Wing
West Bengal Fire & Emergency Services.**

