

**GOVERNMENT OF WEST BENGAL  
OFFICE OF THE DIVISIONAL FIRE OFFICER  
WEST BENGAL FIRE & EMERGENCY SERVICES  
Race Course Para, P.O/P.S. - Jalpaiguri, Pin - 735101**

Memo No : IND/WB/FES/20182019/49100

DATE: 20/06/2019

**From :**

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

**To :**

**Smt Shelly Agarwal And Others  
Ashighar  
Jalpaiguri F.S., Bhaktinnagar,  
Jalpaiguri - 734006 .**

**Sub :Fire Safety Recommendation for a proposed construction of G + 3 storied building under group Residential at the premises no.- Ashighar, Bhaktinnagar, Jalpaiguri - 734006**

This is in reference to your Application No. IND/WB/FES/20182019/49100, dated 20/06/2019, regarding the Fire Safety Measure for a proposed construction of G + 3 storied building under group Residential at the premises no.- Ashighar, Bhaktinnagar, Jalpaiguri - 734006.

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 Part:-

- i) No addition and alteration of the building shall be allowed without the concurrence of the department,
- ii) There should be two staircases from the ground to the terrace of the building in case of any multistoried type building as per NBC and it should be within travel distance up to 22.5

meters.

iii) Risk factor of the building shall be reduced.

(B) Electrical Installation : 1946:1982 ( I:S-694)

i) All electrical installation should be done in accordance with National Electrical Code & Part –VIII “Building Service Section-2” Electrical installation “ good practice.[4(10)].

(ii) All cable should be of FRLS type & all wiring should be done by the copper wire along with appropriate gauge such as 1.2 sq. mm for light, fan, bulbs etc. 2.5 sq. mm for freeze, T.V. & 4 Esq. for geezer, washing Machine etc.

(iii) Electrical installation shall be tested by the licensed Electricians where as 85% fire originated from electrical source of energy.

(C) Alternate power supply : Arrangement shall be made to supply power with the help of a Generator to operate at least the fire pump for deep tube-well , illumination of stairs, corridors, means of escape etc, in case of normal power failure.

(D) Hose Reel System: IS 884-1985, the Hose reel hose system should be provided at each floor of the building. The internal dia of the said hose reel shall be 19mm to 32mm.

Terrace Tank: One Terrace Tank of capacity Minimum 10000 liters Should be provided in the building along with suitable terrace pump & wet riser cum down comer system and the discharge capacity not less than 22.5 LPM. While the length of the hose reel not more than 36.350 meters. The distance of such installation should be in such a way that no part of the floor is more than 6 meters. Distance from a hose nozzle when fully extended.

E) Open Space & approach:

i) The open space available in the building will be kept free of obstruction at all time.

ii) The escape routes of the building should be kept free from any obstruction.

iii) The entrance route of the building should not be obstructed by any way and the width & height of the access gate shall be not less than 4.50 meters and 5.00 meters respectively.

F) Adjacent Fire Risk:

i) The risk to be avoided by keeping open space in between the buildings.

G) Means of Escape:

i) Separate entrance and exits should be provided in every room of the office, class, library & Laboratory.

H) Fire Fighting Water:

i) The building shall have to be equipped with minimum 40000 liters of underground stored water & having replenishing arrangement @ 1000 liters min preferably from two different sources. The height of the reservoir should not be exceeding 30 cm from the round level fire water reservoir shall have overflow and connected with the other reservoir to avoid stagnancy of water. The water reservoir shall be kept full at all time.

ii) The location of the reservoir should be such so that fire service vehicles may get

access to the site of the reservoir with a view to draw the water from the said reservoir.

J) Detection and Alarm System, suppression system and public address system: IS: 2189:1988:

i) Manually operated electrical fire alarm system of break glass type call boxes with hooters, public address system and talk back system should be installed in different vulnerable points of the building and the storage area.

ii) Automatic fire detection system with the help of smoke & heat detectors shall be installed at all places of below and preferably above false ceiling of the building . This system shall also be made available in places of rooms where valuables have been kept. Other requirements shall be made in accordance with the IS code of practice.

iii) Public address system link all floors and control room shall have to be establish.

H) Sprinkler Installation- 9972:2002:- The automatic sprinkler installation shall be provided if needed in the vulnerable place of the building if any as per I.S. Code of practice. Alarm going to be incorporated along with the sprinkler System

I) External hydrant System: IS 13039:1991:

i) The whole area of the building should be protected by the pillar type hydrant with nearly hose boxes and branch pipe etc. i.e. @one pillar type hydrant per 1000 sq. meter of floor area or as per the vulnerability of the area.

J) Small Gears: IS 903:1993: Hose Box ,15 meters permoline delivery hose & gun metal type short branch of half inch dia @ one such set each at the or near all pillar hydrant, landing valves on all area should be installed.

K) First Aid Fire Fighting System: 2190:1992

i) First Aid fire fighting arrangement in the style of placing suitable type of portable fire extinguishers of different types, such as ABC type, Co2 type, Sand and Water fire buckets, etc. Should be installed in all vulnerable locations of the premises of the office , Laboratory ,Library area and other places in accordance with the I.S. code of practice.

l) The protection for buildings shall be provided as given in Part VIII building Services, Section-2 Electrical installation.

#### General Recommendation:

1) Employee and security staff shall be conversant with installed fire fighting equipments of the building on to operate in the event of fire and testing .

2) Arrangement shall be made for regular checking, testing and proper maintenance of all the fire safety installation and equipment installed in the building to keep them in perfectly

good working conditions at all times.

- 3) Mock fire practice and evacuation drill should be performed periodically with participation of all occupants of building.
- 4) Good housekeeping and regular cleaning should be done regularly.
- 5) Combustible articles should be separated from the noncombustible articles.
- 6) Electrical transformer, generator etc. Should be in safe distance from the combustible articles.
- 7) Protection of personnel and provision of means of escape to be provided to avoid being exposed to or being trapped in fire or toxic fumes.
- 8) Elimination of all avoidable sources of ignition and confining all unavoidable sources of ignition.
- 9) Each year a certificate is to be obtained from the appropriate authority of the department certifying about the satisfactory services, performing of all the life and fire safety arrangements and installation of the building.

**Divisional Fire Officer**  
**West Bengal Fire & Emergency Services**

**Signature valid**

Digitally signed by ASHISH  
KUMAR PUTATUNDA  
Date: 2019.06.20 15:03:09 IST