

**GOVERNMENT OF WEST BENGAL
OFFICE OF THE DIVISIONAL FIRE OFFICER
WEST BENGAL FIRE & EMERGENCY SERVICES
P.S. - Kotwali, P.O. - Ghurni, Pin - 741103**

Memo No : IND/WB/FES/20182019/21439

DATE: 07/03/2019

From :

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

To :

**SUSMITA COLLEGE OF EDUCATION
VILL+P.O -BAHIRGACHI, P.S-NAKASHIPARA,DIST- NADIA,W.B
Krishna Nagar F.S., Nakashipara,
Nadia - 741154 .**

Sub :Fire Safety Recommendation for an existing construction of G + 3 storied building under group Educational at the premises No. VILL+P.O:- Bahirgachi,Mouza- Dakshin Bahirgachi, JL No. 104, Plot No. 714, 715, 715, 717 & 718, Khatian No. 2046, PS:- Nakashipara, Dist:- Nadia, Pin:- 741154.

This is in reference to your Application No. IND/WB/FES/20182019/21439,dated 07/03/2019, regarding the Fire Safety Measure for an existing construction of G + 3 storied building under group Educational at the premises No. VILL+P.O:- Bahirgachi,Mouza- Dakshin Bahirgachi, JL No. 104, Plot No. 714, 715, 715, 717 & 718, Khatian No. 2046, PS:- Nakashipara, Dist:- Nadia, Pin:- 741154..

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. (A)CONSTRUCTION:

1. The interior finish decoration of the building shall be made low flame spread materials conforming I.S. specifications.
2. Provision of ventilation at the crown of the central core-duct of the building shall be provided.
3. Arrangements shall have to be made for sealing all the vertical 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 manoeuvrability 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 4.5 Meter and 5 Meter respecting abutting the road.

(C) STAIRCASE:

1. The staircase of the building shall have permanent vents at the top and open able sashes at each floor level in the external wall of the building.
2. All the staircase shall be extended up to terrace of the building and shall be negotiable to each other without entering into any room.

(D) FIRE FIGHTING WATER:

Under Ground Water reservoir Having Water Capacity at 20,000 Lts and Overhead reservoir of 10,000Lts. Capacity exclusively for Fire fighting purpose with replenishing arrangements @ 1000 Lts. /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.

(E) HYDRANT SYSTEM & FIRE PUMP:

1. The building shall be provided with down comer connected to terrace tank through the

terrace pump at 450 Lpm capacity and providing one 100 mm dia pipeline with provision of landing valves at the staircase Landing / half Landing at the rate of one such riser for 1000 sq. Mtr. Of the floor area. The System shall be so designed that shall be kept charged with water all the time under pressure and capable to discharge 1620 lts./ min. At the ground floor level outlet. In both cases the running pressure shall not be less than 3.5 Kgs/Cm². One such booster pump shall be kept as stand-by and suitable replacement arrangement has to be provided for overhead Tank. All other requirements shall conform I.S. 3844-1989.

2. Provision for Hose Reel Hose in conjunction with down comer shall be made at each floor level of the building satisfy the code of I.S. Specifications.

3. Yard hydrant with provision of Two(02) Nos. Hydrant shall be installed in accordance with relevant I.S. specification.

(F) 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. Extinguisher or Medium Velocity / Projector system.

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, Fire Lift etc and also for illuminating the staircase, corridors etc and other places of assembly of the building in case of normal power failure.

(G) DETECTION AND ALARM SYSTEM:

1. 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, talk back 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. Hooter will be sounded in such a manner so that an operation of a Detector or Manual call

point Hooters will sounded on the same floor and immediate alternate floor.

3. Public Address System:

Public address system linked between all floors and control Room shall have to be established.

(H) FIRST AID FIRE FIGHTING SYSTEM:

First Aid Fire fighting arrangement in the style of placing suitable type portable Fire extinguishers, Fire buckets, ceiling hook etc. In all floors and vulnerable locations of the premises shall be made in accordance with I.S. 2190-2010.

(I) OTHER IMPORTANT RECOMMENDATION:

1. Storage of volatile flammable liquid shall be prohibited and the handling of such liquids shall restricted to science Laboratory only.
2. If gas use in the laboratory shall be provided with an approved outside gas shut-off valve conspicuously marked.
3. Chemicals used in laboratory must be kept in separated isolated stores in proper sealed containers. Lab Asst. Must be alert for its maintenance during closing by lock & key after class hours for any spillage, Fumes, Loosen caps, corrosiveness, acids, main valves for Bunsen Burners etc.
4. Sprinklers system should be installed in the Auditorium and Assembly Hall with corridor.

(J) GENERAL RECOMMENDATIONS:

1. Fire License shall have to be obtained from the Licence section of the department for proposed storing and processing with L.P.G. and other highly combustible articles which come under the purview of Licence section.
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. All teaching & non teaching staffs should have adequate knowledge of handling fire protection equipment, evacuation process of students in time of emergency and prevention

measure.

5. 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.
6. Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of building.
7. A trained crew should be allotted in alternative round the clock for safety of the building.
8. Trained Security personal shall be maintained the Installed system round the clock for safety of the building.
9. In every three years 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 and Fire safety arrangements and installation of the building.

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, Final 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 Recommendation will be treated as cancelled.

Divisional Fire Officer
West Bengal Fire & Emergency Services