



Government Of West Bengal  
Office Of The Director General  
West Bengal Fire & Emergency Services  
13D, Mirza Ghalib Street, Kolkata - 16

Memo no.:IND/WB/FES/20192020/75298

Date: 06-03-2023

From:  
Director  
Fire Prevention Wing,  
West Bengal Fire & Emergency Services

To: VIVEKANANDA MISSION HIGH SCHOOL A UNIT OF VIVEKANANDA EDUCATION TRUST  
1574 AND 1568, 1551, 1551/2109, 1567, 1574, MECHOGRAM, P.O.-UTTAR MECHOGRAM, P.S.- PANSKURA, DIST.-  
PURBA MEDINIPUR -721139

Sub: Revised Fire Safety Recommendation for 3 (Three) nos existing construction of G+II storied (Block-A); G+III storied (Block-B); and G+III storied (Block- C) under group Educational Building in the name of VIVEKANANDA MISSION HIGH SCHOOL A UNIT OF VIVEKANANDA EDUCATION TRUST at the premises no. Mouza- Dakshin Mechogram, JL No-74, Khatian No-4860, Dag No-1565 & 1564, PS- Panskura, Dist- Purba Medinipur, under Panskura 1 no Gram Panchayet.

This is in reference to your application no. 0125188231400003 dated 09-01-2023 regarding the Revised Fire Safety Recommendation for 3 (Three) nos existing construction of G+II storied (Block-A); G+III storied (Block-B); and G+III storied (Block- C) under group Educational Building in the name of VIVEKANANDA MISSION HIGH SCHOOL A UNIT OF VIVEKANANDA EDUCATION TRUST at the premises no. Mouza- Dakshin Mechogram, JL No-74, Khatian No-4860, Dag No-1565 & 1564, PS- Panskura, Dist- Purba Medinipur, under Panskura 1 no Gram Panchayet.

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 **Revised Fire Safety Recommendation** in favor of the aforesaid building subject to the compliance of the following fire safety measure.

**Recommendation:**

**CONSTRUCTION:**

- 1.The whole construction 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 I.S. specifications.
- 3.Arrangements shall have to be made for sealing all the vertical & horizontal ducts by the materials of adequate Fire resisting capacity.

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#### PACE & APPROACH:

open space surrounding the building shall conform the relevant building rules.

The approach roads, shall be sufficiently strong to withstand the load of Fire Engine weighing up to 45 M.T.

3. Internal passage way shall be maintained according to the approved plan all the Passage way should be kept clear for free access.

#### STAIRCASE:

1. The staircases of the building shall be enclosed type as shown. Entire construction shall be made of bricks/ R.C.C type having Fire resisting capacity not less than 2 hours.
2. The Staircases of the building shall have permanent vents at the top and openable sashes at the each floor level in the external wall of the building.
3. The width of the staircases both proposed & existing shall be made as marked in the plan. Corridors and the exit doors shall conform the relevant building rules, with up-to-date amendments.
4. All the staircases shall be extended upto terrace of the building and shall be negotiable to each other without entering into any occupied area as shown in plan drawing.
5. Considering the staircases are only means of evacuation, emergency lighting arrangement, directional exit sign etc. shall be made conforming the relevant I.S. Code in this regards.

#### FIRE FIGHTING WATER:

1. Underground water reservoir having water capacity of 60,000 ltr. and Over Head Water Reservoir having water capacity 10000 ltr ( 5000 ltr x 2 nos) as marked in the plan, exclusively for Fire Fighting purpose with replenishing arrangements @ 1000 ltrs. /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.
2. In case of negative suction a Terrace tank with proper replenishment arrangement will have to be provided above the fire pump room connected with all fire pumps.
3. The deep tube wells for the replenishment of the reservoirs shall be connected with dual power supply units.
4. Provision of placing Fire Appliances on the underground water reservoir to be made to draw water in case of emergency.

#### WATER LAYOUT SYSTEM:

1. The building shall be provided with Wet Riser cum Down comer ( feeding water from Underground water reservoir & Over Head Water Reservoir of Block-C ) of 100 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 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 1620 ltr/min. at the ground floor level outlet and minimum 900 ltr/min. at the top most and furthest outlet. In both cases the running pressure shall not be less than 3.5 Kg/Sq.cm. All other requirements shall conforming I.S. 3844 – 1989.

2. Provision for Hose Reel units on swiveling drum in conjunction with Wet Riser shall be made near each lading valves.

3. Adequate numbers of Yard Hydrant shall be installed surrounding the buildings in accordance with relevant I.S. specifications.



Provision of two way collecting head for uses of Fire Services must be provided at the entrance of the building.

#### FIRE PUMP:

1. Provision of the Fire Pump (1620 LPM) 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 respective pump room.
2. One such pump (1620 LPM) shall always be kept on stand-by preferably be of diesel driven type.
3. Provision of Jockey Pump (180 LPM) 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 be of positive type.

#### ELECTRICAL INSTALLATION & DISTRIBUTION:

1. The electrical installation including transformers, Switch Gears, L. T., H. T. Rooms, panel rooms, 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. Electrical distribution system of the building shall be made in the form of concealed wiring or in heavy gauge M.S. conduit continuously bonded to earth. Cables shall be I.S. marked and be of F.R.L.S. categories.
3. The vertical & horizontal ducts shall be sealed at all floor level by approved fire resisting materials.
4. The electrical installation shall be adequately protected with automatic fire detection and suppression system as per provision of N. B. C. Part-4, 2016 and relevant I. S. specification.
5. Alternative Power Supply :  
Arrangements shall have to be made to supply power with the help of a DG Set to operate at least the Fire Pump, Pump for deep Tube-well, Alarm System, signage etc. and also for illuminating the Staircases, corridors etc. and other places of assembly of the building in case of normal power failure.

#### DETECTION & ALARM SYSTEM:

1. Addressable analogue manual call boxes incorporating with sounders shall be installed at each stair landing in all floors areas of the building.
2. Fire alarm panel shall be installed at the Fire Control Room of the premises.
3. All the installations shall also be satisfy the I.S. specifications 2189 (as amended).

##### Fire Control Room:

A well designed Fire Control Room with Fire Control Panel and monitoring 24X7 basis.

##### Preparation of Emergency Evacuation:

There is need to have a clear policy for emergency evacuation plan.

#### 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 materials.
5. Escape route like staircase, common corridors, lift lobby etc. shall not be used as return air passage.



Wherever the ducts pass through Fire wall of floors, the opening around the ducts shall be sealed with Fire resisting materials such as asbestos rope vermiculite concrete etc.

7. The materials used for insulating the duct system (inside or outside) shall be of non-combustible materials glass wool shall not be wrapped or secured by any materials of combustible nature.

#### 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.

#### GENERAL RECOMMENDATIONS:

1. Necessary sanction and approval for such construction and occupancy of this project must be obtained from competent authorities.
2. Lightning arrester shall have to be installed as per existing norms and 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 staff shall be conversant with installed Fire Fighting equipment of the building and to operate in the event of Fire and Testing.
6. The Department of Fire & Emergency Services, Government of West Bengal, shall not take any responsibility in respect of any legal dispute if pending or arises about the title of land / property.
7. This Fire Safety Recommendation cannot be treated in any case of regularization of any unauthorized construction.
8. The management of the organization / building, as the case may be, shall maintain the fire prevention and safety measures in good repair and in efficient condition at all the times, which are installed in the building for use at the time of fire or other emergencies.
9. A trained Fireman shall be maintained round the clock for safety of the building.
10. Electrical audit report shall be obtained from Govt. licence holder Supervisor/ Engineer.
11. Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of building.
12. Accordingly, a certificate is to be obtained from the Director General, West Bengal Fire & Emergency Services certifying about the satisfactory services, performance of all the Fire and Life 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, Fire Safety Certificate in favour of the occupancy shall be issued on being satisfied with the tests and performances of fire & life safety aspects of the building.

N.B. Any deviation and changes the nature of use of the building in respect of 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

Memo No.: INDWB/FES/20192020/75298

Signature Not Verified  
Digitally signed by ABHIJIT  
PANDEY  
Date: 2023.03.06 14:12:00 IST