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**Government Of West Bengal**  
**Office Of The Divisional Fire Officer, South 24 Parganas**  
**West Bengal Fire & Emergency Services**  
**6, Diamond Harbour Road, Silpara, Kol-700008**

Memo no.: FSR/0125186211200138

Date: 14-07-2021

**From:**  
**Divisional Fire Officer, South 24 Parganas**  
**West Bengal Fire & Emergency Services**

**To: EL BETHEL COLLEGE**  
**VILL RASAPUNJA , BAKHRAHAT ROAD , KOLKATA - 700 104**

**Sub: Fire Safety Recommendation for Existing G+3 Storied under Group Educational Building in the name and style of EL BETHEL COLLEGE at the premises no. Vill Rasapunja , Bakhrabat Road , Police Station - Bishnupur, Dist.- South 24 Parganas, Kolkata - 700 104.**

This is in reference to your application no. 0125186211200138 dated 29-03-2021 regarding the Fire Safety Recommendation for Existing G+3 Storied under Group Educational Building in the name and style of EL BETHEL COLLEGE at the premises no. Vill Rasapunja , Bakhrabat Road , Police Station - Bishnupur, Dist.- South 24 Parganas, Kolkata - 700 104.

**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 favor of the aforesaid building subject to the compliance of the following fire safety measure.**

**Recommendation:**

**A) CONSTRUCTION:**

1. The whole construction of the existing 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. Provision of ventilation at the crown of the central core-duct of the building shall be provided.
4. Arrangement shall have to be made for sealing all the vertical and horizontal ducts by the materials of adequate fire resisting capacity.

**B) OPEN SPACE AND APPROACH:**

1. The open spaces surrounding the building shall conform the relevant building rules as well as permit the accessibility and maneuverability of Fire Appliances with turning facility.
2. The approach roads and internal driveways shall be sufficiently strong to withstand the load of Fire Engine weighing up to 30 M.T.
3. The width and height of the access gate into the premises shall not be less than 5 mts. and 5.0 mts. facing the abutting

road.

4. Drive way should be free from any type of obstruction and open to sky. No parking will be allowed on the drive way.

5. All the Passage way should be kept clear for free access.

#### C) 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 2 hours.

2. Two numbers of additional staircase shall be constructed as marked in the plan.

3. The staircase of the building shall have permanent vents at the top and openable sashes at each floor level in the external walls of the building.

4. The width of the staircase shall be made as marked in the plan. Corridors and the exit doors shall conform the relevant Building Rules with up to date amendment.

5. All the staircase shall be extended up to terrace of the building and shall be negotiable to each floor.

#### D) FIRE FIGHTING WATER:

Overhead water reservoir having capacity of 15000 ltrs. exclusively for firefighting purpose with replenishing arrangements @ 1000 ltrs/min. preferably from two different sources of water supply shall be provided. In addition to this, the proposed UGWR of 25000 ltrs capacity exclusively for fire fighting shall also be connected with dedicated pump for supplying the water to the Overhead Fire Water reservoir at the time of need. All the fire water reservoirs shall have overflow arrangement with the domestic water reservoir to avoid stagnancy of water. The water reservoir shall be kept full at all time.

#### E) WATER BASED SYSTEM:

1. Single headed landing valve, connected to Down Comer of 100 mm internal diameter taken from the terrace pump delivery should be provided at each floor/ landing. A hose reel conforming to IS 884 : 1985 and directly tapped from the down-comer pipe should also be provided on each floor/landing. All other requirements shall be fulfilled as per IS 3844:1989.

2. Fire Service inlet shall be provided with the Down Comer in accordance with relevant I.S. specification.

#### F) FIRE PUMP:

Provision of Terrace Fire pump of 900 LPM discharge capacity shall have to be provided to supply Water at the rate designed pressure i.e. minimum 3.5 kg/sq.cm (running pressure) at the top most point 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. All the pumps shall be incorporated with both manual and auto starting facilities. The suction of pumps shall preferably of positive type.

#### G) ELECTRICAL INSTALLATION AND DISTRIBUTION:

1. The electrical installation including Transformers, Switch Gear, 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 per relevant I.S. specification.

2. The vertical and horizontal electrical ducts shall be sealed at each floor level by fire resisting materials/ fire barrier.

3. The electrical installation shall be adequately protected with CO2/D.C.P.

4. Arrangement for alternative power supply shall have to be made to supply power with the help of a generator to operator at least the Fire Pump, Deep Tube-Well Pump, Fire Alarm System etc. and also for illuminating the Staircase, Corridors, Lobbies etc. and other places of assembly of the building in case of normal power failure.

#### I) DETECTION AND ALARM SYSTEM:

1. Manually operated Electrical Fire Alarm System with at least adequate 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 entrance of ground floor of the building, other requirements of the system shall be made conforming I.S. 2189-2008.

2. Detection system with the help of smoke shall be provided within the building in accordance with I.S. 2189-1988.
3. Hooter will be so arranged so that sound can be heard from any corner of the building on operation of any Detector or Manual Call Point.
4. Public Address System linked between all floors and Control Room shall have to be established.

**J) FIRST AID FIRE FIGHTING SYSTEM:**

First Aid Fire Fighting arrangement in the style 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.

**K) GENERAL RECOMMENDATIONS:**

1. Fire License shall have to be obtained for storing and processing of L.P.G. and/or other 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. Details floor wise Evacuation Plan shall be prepared and be displayed at all vulnerable places of all floors of the building.
5. The employees and security staffs shall be conversant with installed Fire Fighting System/equipment of the building and to operate in the event of Fire and Testing.
6. Arrangement shall be made for regular checking, testing and proper maintenance of all the Fire Safety measures installed in the building to keep them in perfectly good working conditions at all times.
7. To eliminate risk of Fire Hazards, Good House Keeping both for insides and outside of the building shall be strictly maintained.
8. A crew of trained Fireman under the experienced Fire Officer shall be maintained round the clock for safety of the building.
9. Mock Fire practice and Evacuation Drill shall be performed periodically with participation of all staff and students of the building.

On compliance of all the above Fire Safety Recommendation, the Divisional Fire Officer, South 24 Parganas, shall be approached for necessary inspection and testing of all the installation and Fire Safety Certificate in favour of the occupancy shall be issued on being satisfied with the tests and performances of safety aspects of the installations of the building.

**N.B. :** For any deviation and/or changes in the nature of use or construction 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.

Divisional Fire Officer, South 24 Parganas  
West Bengal Fire & Emergency Services