# OFFICE OF THE DIRECTOR GENERAL WEST BENGAL FIRE & EMERGENCY SERVICES 13-D Mirza Ghalib Street, Kolkata- 700 016

Memo No: IND/WB/FES/20192020/3625

DATE: 06/01/2020

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

To:
ASHOK KUMAR SARKAR & ARUP SARKAR
R.S PLOT NO- 43/67, L.R PLOT NO- 287,288,
KHATIAN NO- 1724, 1725,
J.L No- 111, MOUZA-TETIKHOLA,
F.S. DURGAPUR., PS N.T.P.S,
DIST- PASCHIM BARDHAMAN-713212.

Sub: Fire Safety Recommendation for occupancy of G+8 storied building under group Residential Building in the name of "ASHOK KUMAR SARKAR & ARUP SARKAR" at premises no. R.S PLOT NO- 43/67, L.R PLOT NO- 287,288, KHATIAN NO- 1724, 1725, J.L No- 111, MOUZA-TETIKHOLA, F.S. DURGAPUR., PS N.T.P.S, DIST- PASCHIM BARDHAMAN-713212.

This is in reference to your Application No. IND/WB/FES/20192020/3625, dated 27/02/2020, regarding of the Fire Safety Recommendation for occupancy of, G+8 storied building under group Residential Building in the name of "Ashok Kumar Sarkar & Arup Sarkar" at premises no. R.S Plot no- 43/67, L.R PLOT NO- 287,288, Khatian no- 1724, 1725, J.L no- 111, Mouza-Tetikhola, PS N.T.P.S, Dist- Paschim Bardhaman -713212...

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:

#### A.CONSTRUCTION

 The whole construction and lay out of proposed educational building shall remain same as per approved plan and shall never be altered with prior approval of this Department and strictly follow local Panchayet / Municipal Rules.

- The floor area exceeds 750 Sq M shall be suitably compartmented by separation walls up to ceiling level having at least two hours fire resisting capacity.
- The interior finish decoration of the building shall be made low flame spread materials conforming I.S. specification.
- Provision of ventilation at the crown of the central core-duct of the building shall be provided.

# B. OPEN SPACE & APPROACH:

- 1.The open space 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 shall be sufficiently strong to withstand the load of fire engine weighting up to 45 M.T.

## 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 4 hrs.
- 2. The width of the staircases shall be made as marked in the plan. Corridors and the exit doors shall conforming the relevant building rules.
- 3. All the staircase shall be extended up to terrace of the building and shall be negotiable to each other without entering into any room.
- 4. Fire and smoked doors at the entrances of all the staircases 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.

#### D. FIRE FIGHTING WATER:

Underground water reservoir having water capacity of 50000 Ltrs and Overhead water reservoir having water capacity of 20000 Ltrs exclusively for fire fighting purpose with replenishing arrangements @ 1000lts. /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.BASEMENT

- The basement shall be adequately ventilated.
- 2. The basement shall be protected with Auto Sprinklers system, hydrant and hose reel system etc.
- 3.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 detector or sprinkler. It shall also have an arrangement to start it manually.
- 4. Mechanical extractors shall have an alternative source of power supply.

#### F.LIFT:

- 1.The walls of the lift enclosure of the buildings shall be at least two hours FIRE resisting type and all the lift lobbies and shafts shall be pressurized as per existing norms and provision of NBC Part IV. 2016.
- One of the lift in each block shall be designed for Fire Lift. The Word "FIRE LIFT" shall conspicuously written at ground floor.
- 3.Exit doors of the lift shafts shall be through a self- closing smoke stop door of 2 hours fire resistance.
- 4.In case of failure of normal electric supply, it shall automatically trip to alternate supply and also shall have manually operated change over facility. The lift shall be so wired that in case of power failure, it comes down at the ground level stands still with door open.
- 5.All other requirements shall conform relevant I.S. specification including the communication facility in the lift cars connecting with the Fire Control Room of the building.

#### E.HYDRANT SYSTEM:

- 1. The building shall be provided with 150mm internal diameter pipe line with provision of Yard Hydrant/ Ring Main Hydrant with adequate numbers shall be installed surrounding the residential and commercial building in accordance with relevant I.S. specification. The system shall be so designed a 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 and minimum 900 lts/min at the top most outlet in both case the running pressure shall not be less than 3.5kgs/ sq.cm. All other requirements shall conform I.S. 3844-1989.
- 2. Provision for Hose reel in conjunction with Wet Riser shall be made at all floor level conforming the relevant I.S. Specifications.

## F. SPRINKLER INSTALLATION:

The automatic Sprinkler installation shall be provided in the entire store, and commercial areas of the commercial building as per I.S. 9972. Alarm gong to be incorporated along with the sprinkler system.

#### G. FIRE PUMP:

- 1.Provision of the Fire Pump 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 building. One such pump shall always be kept on Stand-by preferably be of diesel driven type.
- 2.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 pumps shall preferably of positive type or in case of negative section the system shall be Wet Riser-cum-Down comer with suitable terrace pump with overhead tank.

# H. 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 electrical installation shall be adequately protected with CO2/D.C.P. Extinguisher or modular.
- I. 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.

# J. DETECTION, ALARM AND SUPRESSION SYSTEM:

- 1.Manually operated Electrical Fire Alarm system with adequate numbers of break glass type call boxes fitted with Hooter at each floor connecting with control panel at 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.Auto fire detection system with the help of heat or smoke detectors in all places of bellow and above false ceiling, beam detectors in the auditorium area of the building shall be installed. The system shall also be made in all places where valuable articles have been kept. The other requirements of the system shall be made in accordance with I.S.2189-1988.
- 3. The Suppressions system shall be made with fire extinguishers as per suitability particularly inside the building and in room of irreplaceable articles.
- 4. Hooter will be sounded in such a manner so that an operation of a detector or Manual Call Point. Hooters will sounder on the same floor and immediate alternate floor.
- 5. Public Address System:

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 placing suitable Fire Extinguishers, Fire Buckets etc. in all floors and vulnerable of locations of the premises shall be made in accordance with I.S. 2190-1992.

#### K. GENERAL RECOMMENDATION:

- 1. Fire License shall have to be obtained for proposed storing and processing with L.P.G. and 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. Directional sign of escape route shall be displayed prominently.
- 4. 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.

- 5. Arrangement shall be made for regular checking, testing and 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. A crew of trained Fireman under the experienced Officer shall be maintained round the clock for safety of the building.
- 7. Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of building.
- 8. Fire Safety Certificate shall be obtained on compliance of all 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 and Life safety recommendations will be treated as cancelled.

Signature valid

Digitally signed by TARUN KUMAR SING Date: 2020.01.56 17:14.01 IST

Director West Bengal Fire & Emergency Services