

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

Memo No : IND/WB/FES/20182019/39074

DATE: 19/06/2019

From :

The Director

Fire Prevention Wing,

West Bengal Fire & Emergency Services.

To :

SIGNATURE APARTMENT A PROJECT OF SWEET HUT DEVELOPERS

MOUZA-RAIGACHI, JL NO-12, RS DAG NO-535(P), LR KHATIN NO-2355, 2273, RS NO-

194, TOUZI NO-169, RAJARHAT, DIST-NORTH 24 PARGANA UNDER RAJARHAT

BISHNUPUR 1 NO GRAM PANCHYAT

Bidhan Nagar F.S., Rajarhat,

North 24 Parganas - 700135 .

Sub :Fire Safety Recommendation for a proposed B+G+V storied residential building at R.S. Dag No. 535(P), Mouza- Raigachi, J.L. No.- 12, L.R. Khatian No.- KRI 845, 1551, R.S. No.- 194, Touzi No. 169, Rajarhat, Dist.- North 24 Parganas under Rajarhat Bishnupur Ino Gram Panchayat.

This is in reference to your Application No. IND/WB/FES/20182019/39074, dated 19/06/2019, regarding the Fire Safety Measure for a proposed B+G+V storied residential building at R.S. Dag No. 535(P), Mouza- Raigachi, J.L. No.- 12, L.R. Khatian No.- KRI 845, 1551, R.S. No.- 194, Touzi No. 169, Rajarhat, Dist.- North 24 Parganas under Rajarhat Bishnupur Ino Gram Panchayat..

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. HYDRANT SYSTEM :

- 1.Suitable number of yard hydrant at strategic location with door hose boxes, containing 1 length of 63mm delivery hose and short branch pipe shall be provided and surrounding the building conforming I.S. 3844-1989 (upto date amendment).
- 2.The building shall be provided with Wet Riser (100mm dia) with provision of single hydrant outlet in each floor at the staircases landings/half landings as per suitability.
- 3.Hose Reel Unit:- Provision of hose reel units on swiveling drum in conjunction with wet riser near each landing valves shall be made at each floor level of the building.
- 4.All other requirements of the water based Fire Protection System shall be made as per I.S. Specification 3844-1989 (with up to date amendment).
- 5.Basement, ground and first floor areas of the building shall be suitable protected by automatic Sprinkler installation conforming the grade as per I.S. Specification 9972.
- 6.Alarm gong to be incorporated along with the sprinkler system.

2. FIRE PUMP :

- 1.Fire Pump having discharge 1200Lts. per minute giving a pressure not less than 0.3N/Sq.m.
- 2.A stand by pump of equal capacity shall be provided on the alternate source of power supply.
- 3.Provision of jockey pump shall also have to be installed to keep up the water based system under pressurized condition at all the time. The running pressure shall not be less than 3.5Kgs/Sq.cm.
- 4.All other requirements shall conform I.S. specification 3844-1989.
- 5.All the pumps shall be incorporated with both manual and auto starting facility and with alternate power supply.

3. AUTO DETECTION AND ALARM SYATEM:

- 1.Manually operated Electrical fire alarm system with break glass type call boxes fitted with hooter on the first floor level. Other requirements of the system shall be made conforming I.S. 2189-1988.
- 2.Auto Fire Alarm System with analogue smoke/heat detectors as per suitability shall be installed in the basement car parking areas, ground shop areas and first floor community halls areas of the building.
- 3.Hooter will be sounded in such a manner so that an operation of a Manual Call Point, Hooter will be sounded in all floors.
- 4.Public address system shall preferably be installed in all floors.

4. 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.

5. CONSTRUCTION:

1. The construction of the proposed building shall be carried out as per approved plan drawings conforming the relevant building rules of local building rule and shall remain same as per approved plan of this Department.

2. Any deviation with regard to the construction shall be verified by the concerned building sanctioning authority.

3. Materials for rapid flame spread categories including untreated wood fiber board etc. shall be not use. The doors and windows preferably shall be made of metal.

4. The interior finish decoration of the building shall be made with the materials with low flame spread and low smoke/non-toxic gas generating categories conforming I.S. Specification.

5. Arrangement shall have to be made for sealing all the vertical ducts by the materials of adequate Fire resisting capacity.

6. Service ducts and shafts should be enclosed by a wall of 2 hours and doors of one hour fire rating. All such ducts shall be properly sealed and Fire stopped at all floor levels.

6. OPEN SPACE AND APPROACH:

1. The abutting road shall permit the accessibility and maneuverability of fire appliances.

2. The open space surrounding the building shall be kept clear open to sky and shall conform the relevant building rules as well as permit the easy accessibility and maneuverability of the Fire Appliances.

3. The width and height of the entry gates to the premises shall be 4.5m wide and 5.0m high (as marked in the plan drawing) respecting the abutting road.

4. The open space surrounding the building shall be kept clear open to sky and shall conform the relevant building rules as well as permit the easy accessibility and maneuverability of the Fire Appliances.

5. The internal drive way shall be sufficiently strong to withstand the load of Fire Engine weighting up to 45 M.T.

6. No parking will be allowed on the Drive-Way.

7. STAIRCASE:

1. The staircase should have permanent vents at the top and openable sashes at each floor level in the external wall of the building.

2. Fire Check Doors as shown/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 window glass fitted with self closing type and openable in the direction of escape.

3. Staircase shall be kept un-obstructed all the time.

4. 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.
5. Corridor/lobby of the building shall be kept un-obstructed all the time.

8. BASEMENT:

1. The Basement shall be adequately ventilated.
2. Mechanical smoke venting arrangements shall be provided to the basement with auto and manual start facility conforming the I.S. Specification.
3. Mechanical extractors shall have an alternative source of supply.
4. The entire basement shall be protected with Auto Sprinkler system, Hose reel system, Hydrant system and suitable type of Detector conforming to I.S. Specification 3844-1989.

9. ELECTRICAL INSTALLATION & DISTRIBUTION:

1. The electrical installation including 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 each floor level.
3. The electrical installation shall be adequately protected with CO₂ / D.C.P.
4. 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 the earth. Cables shall be I.S. marked and preferably be of F.R.L.S. categories. M.C.B. shall be installed in electrical circuit to avoid electrical fire hazards.
5. Mechanical ventilation for Electrical Panel Room shall be provided.
6. Alternative power supply : Arrangement shall have to be made to supply power with the help of a generator to operate at least the Fire Pump, Fire Alarm System, etc. and also illuminating the staircase, corridors etc. and other assembly places of the building/premises in case of normal power failure.

10. FIRE FIGHTING WATER:

1. One Underground Water Reservoir having water capacity of 50000Lts. (shown/marked in the plan) exclusively for fire fighting purpose. The replenishment arrangements @ 1000 Lts./min. preferably from two different sources of water supply shall be provided for Fire Water Reservoir.
2. Exclusive Fire Over Head Water Reservoir having capacity 5000Lts. shall be constructed and shall be connected with wet riser system through N.R.V. and butterfly valve.
3. The Fire Water Reservoirs shall have overflow arrangement with the domestic Water Reservoir as well as to avoid stagnancy of water. The fire fighting water reservoir shall be kept full at all time.
4. The deep tube well for the replenishment of the reservoirs shall be incorporated with the auto starting facility with the actuation of auto detection and suppression arrangement of the

premises and shall also be connected with dual power supply units.

5.Provision of placing Fire Appliances near the underground water reservoir to be made to draw water in case of emergency. Provision of necessary manholes shall be made on the top of the reservoir as per specification.

6.Provision of Fire Service inlet shall be installed at suitable place.

11. GENERAL RECOMMENDATIONS:

1.Fire License shall have to be obtained for proposed storing and processing with L.P.G. and other highly combustible articles.

2.Exit signage, Fire Notice for Fire Fighting and evacuation from the building shall be prepared and be displayed at all vulnerable places of the building.

3.All residents and security staffs should have adequate knowledge of handling fire protection equipment, evacuation process in time of emergency and testing.

4.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.

5.Haphazard indoor or outdoor storage shall be avoided.

6.Drill: Must be acquainted with evacuation passage of escape route by practicing as a drill with all residents, employees and security staffs as a drill every month as a special duty and records of which must be kept in their custody.

7.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.

On compliance of all the above Fire & Life Safety Recommendations, the Director General, West Bengal Fire & Emergency Services shall be approached for necessary inspection and testing of the installations, 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 safety recommendation will be treated as cancelled.

Signature Not Verified
Digitally signed by TARUN
KUMAR SINHA
Date: 2019.06.19 14:34:02 IST

Director
West Bengal Fire & Emergency Services