

**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/20172018/1965

DATE: 08/06/2018

From :

The Director

Fire Prevention Wing,

West Bengal Fire & Emergency Services.

To :

SHIV NIKETAN PVT LTD

**MOUZA- NAOABAD, J.L.- 19, R.S. DAG NO.- 376(P),378(P),379(P), 380(P) & 381 (P), L.R. KHATIAN NO.-329,832,275,504,139,703,247,123,605,648,298,17,586,740 & 763, P.S.- BISHNUPUR, DIST.-24 PGS.(S), UNDER RASAPUNJA GRAM PANCHAYET
Diamond Harbour F.S., Bishnupur,
South 24 Parganas - 700104 .**

Sub :Fire Safety Recommendation for Proposed 3nos adjoining G+IX storied building i.e. Block -1 and G+IX storied single building i.e. Block - 2 under group Residential Building in the name of "SHIV NIKETAN PVT LTD" at premise no. MOUZA- NAOABAD, J.L.- 19, R.S. DAG NO.- 376(P), 378(P), 379(P), 380(P) & 381(P), L.R. KHATIAN NO.-329, 832, 275, 504, 139, 703, 247, 123, 605, 648, 298, 17, 586, 740 & 763, P.S.- BISHNUPUR, DIST.-24 PGS.(S), UNDER RASAPUNJA GRAM PANCHAYET, PIN- 700104.

This is in reference to your Application No. IND/WB/FES/20172018/1965,dated 08/06/2018, regarding the Fire Safety Measure for Proposed 3nos adjoining G+IX storied building i.e. Block -1 and G+IX storied single building i.e. Block - 2 under group Residential Building in the name of "SHIV NIKETAN PVT LTD" at premise no. MOUZA- NAOABAD, J.L.- 19, R.S. DAG NO.- 376(P), 378(P), 379(P), 380(P) & 381(P), L.R. KHATIAN NO.-329, 832, 275, 504, 139, 703, 247, 123, 605, 648, 298, 17, 586, 740 & 763, P.S.- BISHNUPUR, DIST.-24 PGS.(S), UNDER RASAPUNJA GRAM PANCHAYET, PIN- 700104..

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 whole construction of the proposed building shall be carried out as per approved plan drawings conforming the relevant building rules of local Municipal Body.

2.The floor area exceeds 750m² shall be suitably compartmented by separation walls up to ceiling level having at least two hours Fire resisting capacity.

3. The interior finish decoration of the building shall be made low flame spread materials conforming I.S. specifications.

4.Provision of ventilation at the crown of the central core-duct of the building shall be provided.

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

6.Roof is used as a refuge area in case of an emergency and it should be clear open for all time. No permanent or temporary structure will be allowed on the roof.

2. 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 appliance 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 – 5 M respecting abutting the road.

3. 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 hours.

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

3.The width of the staircases shall be made as marked in the plan. Corridors and the exit doors shall conforming the relevant building rules with up-to-date amendments.

4.All the staircase shall be extended up to terrace of the building and shall be negotiable to each other without entering into any room.

5.Fire and smoke doors at the entrances of all the Staircase enclosures as marked in the plan at each floor level shall be provided. The F.C.D. shall be of at least two hour Fire resisting wire glass window fitted with self-closing type openable in the direction of escape.

4. D.LIFT:

1.The walls of the lift enclosure of the building shall be at least one hours FIRE resisting type respectively marked in the plan with the event at top of area not less than 0.2m².

2.The lift of the building shall be designed at high speed "Fire Lift" and conspicuously indicated marked in the plan.

3.The Electric power shall be from separate supply mains in the building and cables run with in the lift shafts, light and fans in the lift cars shall be operated from 24 volts, supply on emergency in case of failure of normal power supply lift shall automatically trip over alternate power supply.

5. E.REFUGE AREA:

1.The Refuge area on calculating the area at the rate of 0.3 m²/ person on the basis of floors area shall be provided on the external wall as cantilever projection or any other suitable means at 24m. height of the building.

2.The refuge area shall be of Fire resisting construction and protected with self-closing F.C.D. at the entrance from the corridor or the staircase lobbies.

3.The position of refuge Areas shall be such that they are negotiable by the Fire service Ladder from the ground floor.

6. F.FIRE FIGHTING WATER :

1. Underground water reservoir having water capacity at 100,000 ltrs (1 Lakh) and overhead reservoir of 10000 ltrs. capacity each exclusively for Firefighting purpose shall be kept full at all time.
2. The water reservoir shall have overflow arrangement with the domestic water reservoir as well as to avoid stagnancy of water.
3. Provision of necessary manhole shall be made on the top of this reservoir as per specification.
4. Provision of replenishment at the rate of at least 1000 lts./min. from two separate source of water supplies shall be made.
5. The deep tube wells for the replenishment of the reservoir shall be incorporated with auto starting facility with actuation of auto detection and suppression arrangement of the premises and shall also be connected with dual power supply units.
6. Provision of placing Fire Appliances on the underground water reservoir to be made to draw water in case of emergency.

7. G. FIRE PUMP :

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 be of diesel driven type.

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 suction the system shall be wet riser with suitable terrace pump with overhead tank

8. H. HYDRANT SYSTEM:

1 The building shall be provided with Wet Riser at 150mm. 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 2850 lts/min. at the ground floor level outlet and minimum 900lts/min. at the top most outlet. In both cases the running pressure shall not be less than 3.5Kgs/Sq.cm. All other requirements shall conforming I.S. 3844 – 1989.

1 Yard Hydrant / Ring Main Hydrant with provision of two numbers Hydrant With one number Fire Service Inlet shall be installed the building in accordance with relevant I.S. specification.

2 Proper Replenishing Arrangement shall have to be made to keep the O.H.W.R. full at all

time.

9. I.SPRINKLER INSTALLATION:

The automatic Sprinkler installation shall be provided in Community Hall at ground floor in the building as per I.S. 9972. Testing Sprinkler line shall be provided.

10. J.ELECTRICAL INSTALLATION & DISTRIBUTION :

1The 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.

2The vertical & horizontal ducts shall be sealed at all floor level by fire resisting materials.

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

4All electrical installation viz. Transformer Switch Gear L. T., H. T. rooms shall be protected with both auto detection and suppression systems as per suitability.

5Alternative 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, etc. and also for illuminating the Staircase, corridors etc. and other places of assembly of the building incase of normal power failure.

11. K.DETECTION, ALARM AND SUPPRESSION SYSTEM :

1.Auto fire detection system with the help of smoke detector shall be installed in Community Hall at ground floor in the buildings. The other requirements of the system shall be made in accordance with 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.

12. L.Air Conditioning System (If Any):

- 1.Joints must be avoided in AC wires. It must be ensured that all AC units are comprehensively serviced before operation and filter is cleaned regularly through authorized service agency which increases cooling as well as results in less electric consumption.
- 2.Never use AC units on normal plug points or temporary extension boards except on covered MCB's.
- 3.Switch off air-conditioners, lights, fans, exhaust fans, heat convectors, fax machines, computer monitors, printers /scanners/UPS, inverters, photocopiers, TVs and other office equipment's when they are not in use. Switch on only those lights fans, air-conditioners or other equipment's which are required for functioning office. Do not leave air-conditioners, heat convectors, lights, fans and other electrical equipment's and gadgets in 'ON' position when not required.
- 4.Keep the doors / Windows of air-conditioned rooms close to avoid loss of conditioned air. Provide automatic door closers. Use air-conditioner fan/blowers and fans at low speed.
- 5.In summer reduce load on air-conditioners by putting curtains/blinds/shades on windows.
- 6.Window type air-conditioners/split type AC's being highly energy intensive equipment's; they should be serviced at least thrice in a year as per the recommendations of manufacturers, The servicing included cleaning of air filters, cleaning of condensers/cooling coil, service and oiling of fan motors, checking of fasteners, checking of electrical spares, checking of current/voltage and checking of room temperature and grill temperature.
- 7.Replace old air-conditioners which have out-lived their useful life i.e. 7 years as per Competent authorized agency maintenance manual 2012 and have become unserviceable with star rated Energy Efficient air conditioners.

13. M.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.

14. N.GENERAL RECOMMENDATIONS:

1 Disposable type B. A. Musk to be kept always for emergency fire situation.

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 The occupancy 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 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 A crew of trained Fireman 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 Each year 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, 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.

Director
West Bengal Fire & Emergency Services