



Government Of West Bengal  
Office Of The Divisional Fire Officer, Jalpaiguri  
West Bengal Fire & Emergency Services  
Jalpaiguri Fire Station, Race Course Para,  
P.O. & P.S. :- Jalpaiguri, Pin:- 735101

Date: 15-05-2023

Memo no.:FSR/0125186237900090

From:  
Divisional Fire Officer, Jalpaiguri  
West Bengal Fire & Emergency Services

To: Sri Ajay Ghosh, Sri Jagadish Saha  
Mouza-Dabgram, Kh no-82 Rs, 55 71 LR, Plot No-177RS, 33, 34 LR Ward No-41, P.S.-Bhaktinagar, Dis-Jalpaiguri

Sub: FIRE SAFETY RECOMMENDATION FOR PROPOSED G(PARKING)+4 STORIED RESIDENTIAL CUM COMMERCIAL BUILDING, MOUZA-DABGRAM, WARD NO.-41 (S.M.C), PS.-BHAKTINAGAR, PARGANA-BAIKUNTHAPUR, DIST.- JALPAIGURI, PIN-734001

This is in reference to your application no. 0125186237900090 dated 07-03-2023 regarding the FIRE SAFETY RECOMMENDATION FOR PROPOSED G(PARKING)+4 STORIED RESIDENTIAL CUM COMMERCIAL BUILDING, MOUZA-DABGRAM, WARD NO.-41 (S.M.C), PS.-BHAKTINAGAR, PARGANA-BAIKUNTHAPUR, DIST.- JALPAIGURI, PIN-734001

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. FIRST AID FIRE FIGHTING SYSTEM:-2190:1992:

1) Sufficient Nos of portable fire extinguishers such as DCP types, Water type, Co2 type and sand ,water buckets etc. Should be provided at different places of the building and these should be installed within the reach of all concern as stated the IS code i.e. One no @ 1000sqm floor area or as per vulnerability.

B. CONSTRUCTION PART :

- 1) The whole construction of the proposed building shall be carried out as per approved plan of Municipality/ Local Authority and conforming the relevant building rules of said local authority.
- 2) The floor area exceeds 750sqm shall be suitably compartmented by separation walls up to ceiling level having at least two hrs fire resisting capacity.
- 3) The interior finish decoration of the building shall be made of low flame spread materials conforming I.S specification.



5) Doors & windows should be of at least 2 hrs of Fire resisting type.

6) All opening of services ducts, void ,gaps, joints etc. should be sealed with fire check materials.

**C) 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 withstanding the load of fire engine weighting up to 45 MT.

3) The width and height of the access gates into the premises shall not be less than 4.5 mts respectively from the abutting road.

**D) MEANS OF ESCAPE :**

1) The staircase of the building shall be enclosed type & construction shall be made of Brick/RCC type having fire resistance capacity not less than 4 hrs.

2) Time of evacuation should be as per I.S 1644-1988 i.e. 2.5 minutes.

3) The width of the staircase shall be 1.25 meters , Corridors of the building and the exit door shall be conforming the relevant building rules.

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

5) Fire & Smoke doors at the entrance of all the staircases enclosure at each floor level shall be provided. The F.C.D shall be at least two hours fire resisting with self closing type open able in the direction of the escape.

6) In no way the travel distance from any point of the building exceeds the limit of 22.5 meters

7) The staircases of the building shall have permanent vents at the top and open able sashes at each floor level in the external wall of the building.

8) Parking area should not be used for any storage .

9) There should be two staircases from the ground floor to the terrace of the building.

**E. ELECTRICAL INSTALLATION : 1946 : 1982 ( I.S.- 694):**

1) All electrical wiring to be replaced as per the National electrical Code & Part-vii 'Building Service' Section 2 'Electrical installation' good practice [4(10)].

2) All electrical cable should be of FRLS type & all wiring should be done by the copper wire along with Appropriate gauge such as 1.2sq.mm for light, fan, bulbs etc. 2.5 sq.mm for freeze, TV & 4 sq.mm for geyser, washing machine etc. less than 0.2 m<sup>2</sup>

3) Electrical installation shall be tested by the licensed electrician where as 85% fire originates from electrical source of energy.

**F. IN CASE OF AIR CONDITION : I.S 659-1991 : It shall conform to the following**

1) Escape routes like corridors, lift lobbies etc. shall not be used as return air passages.

2) Regular check up of all split types window machine to prevent dust, foreign materials in the air inlet should maintain to prevent spontaneous combustion.

3) In case of central AC system the same shall be incorporated with automatic dampers with fusible link with a view to shut down the system automatically.

4) Regular checking, testing, cleaning the Air inlet is must .

5) AHU room shall not be used for storage of combustible materials.

**G. IN CASE OF LIFT:-**

1) The walls of the lift enclosures shall be at least two hour fire resisting type and collapsible gate shall not be permitted. The lift materials should be four hours fire resisting type.

2) The door of the lift should be one hour fire resisting type.



- 3) The landing door should be half an hour fire resisting type .
- 4) The area of the lift car should be minimum 1.4 sq. Meters and the load bearing capacity of the lift should be minimum 554 kg each.
- 5) In case of failure of normal power supply it shall be automatically trip over the alternate power supply. This change over the power supply could be done through manually also be change over switch alternatively. The lift shall be so wired that in case of power failure, it comes down at the ground level and comes to stand still with the door open.
- 4) A sign shall be posted and maintained on every floor at or near the lift indicating that incase of fire the occupants shall use the staircase unless instructed otherwise. The sign also contain a plan for each floor showing location of the staircase.

#### H. ALTERNATE POWER SUPPLY:-

- 1) Arrangement shall have to be made to supply of power with the help of Generator to operate at least fire pump, pump for deep tube-well, fire alarm system, Fire lift, illumination of escape routes, detection system with hooters , fire installation system etc. in case of normal power failure.

#### I. FIRE FIGHTING WATER:-

- 1) The building shall have to be equipped with minimum 30,000 lts of underground stored water & having replenishing arrangement @ 1000 lts. /min preferably from two different sources. The height of the reservoir should not be exceeding 30cm from the ground level . Fire water reservoir shall have overflow and connected with the other reservoir to avoid stagnancy of water. The water reservoir must be kept full at all time.
- 2) The location of the reservoir should be such so that fire service vehicles may get access to the site of the reservoir with a view to draw the water from the said reservoir.

#### J. TERRACE TANK:-

- 1) One terrace tank of capacity minimum 10,000 lts should be installed in the premises of the building along with suitable terrace pump & wet rises-cum-down-comer system.

#### K. DETECTION & ALARM SYSTEM, SUPPERSSION SYSTEM AND PIBLIC ADDRESS SYSTEM; I.S:2189:1988:-

- 1) Sufficient Nos. of manually operated electrical fire alarm system of break glass type call boxes and fitted with alarm like hooters with public address system ,talk back system at different places of the building should be installed and connecting with audio visual panel board shall be made in Control Room as per the I.S. Code of practice. The Control Room should be available in the ground floor.

#### L. PUMPS FOR FIRE FIGHTING WATER I.S 12469:1988:-

- 1) The Fire pump should be installed and arranged in such a manner so that it will start automatically due to fall in pressure as prefixed in the installation by installing a jockey pump. As per NBC Code the discharge capacity of the said pump 900 lts/m.
- 2) All the pumps shall be so designed as to supply water at the designed pressure and discharge into the water based system which shall be installed in the building.
- 3) One such pump shall always be kept on standby preferably be of diesel driven type.
- 4) Provision of jockey pump shall also be made available to keep the water based system under pressurized condition at all times.
- 5) All the pumps shall be incorporated with both normal and auto stating facilities, the suction of the pump Shall preferably positive type or incase of negative suction the system shall be wet riser-cum-down-comer-with suitable terrace pump fitted with over head tank.

#### M. SMALL GEARS IS: 903:1993:-

- 1) Hose box, 15 meters permoline delivery hose & gun metal type short branch of half inch dia @ one



such set each at or near all pillar hydrant, landing valves on all floors Of the building should be installed.

**N. INTERNAL HYDRANT SYSTEM : I.S. 3844-1989:**

1. Pressurized risers of 100 mm dia each should be provided at each staircases with provision of landing valve at each landing and half landing @ one such riser for each 1000 sq. meters of floor area of the building or as par the vulnerability of the area. This system shall be designed in such a manner that it should be kept charged with water at all time and capable of discharge 2850 liters of water par minutes at the ground level & minimum 900 liters par minutes at the top most out lets.
- 2) In both the cases, the running pressure at the ground level shall be 3.5 kg/sq.cm & 2.5 kg/sq.cm at the top most landing valves should be ensured.

**O. EXTERNAL HYDRANT SYSTEM IS:13039:1991:-**

- 1) The surrounding area of the building should be protected by adequate Nos of pillar type yard hydrants system as per I.S. code of practice with nearby hose boxes and branch pipe etc.i.e @ one pillar type hydrant per 1000sq.meters of floor area or as per the vulnerability of the area.

**P. HOSE REEL HOSE SYSTEM I.S.: 884:1985:-**

- 1) This system should be installed inside the building as well as in the overall area. The internal dia of the Said hose reel shall be 19 mm to 32 mm and the discharge capacity not less than 22.5 lts per minutes. While the length of the hose reel not more than 36.50 meters. The distance of the such installation should be in such a way so that no part of the floor is more than six meters distance from a hose nozzle when fully extended.

**Q. LIGHTING PROTECTION OF THE BUILDING:**

- 1) This protection for building shall be provided as given in part viii Building Services, Section-2 Electrical installations.

**R. GENERAL RECOMMENDATION:-**

- 1) Good housekeeping and regular cleaning should be done regularly.
- 2) All the occupants and others people with security staff shall be conversant with the installed fire fighting equipments of the building so that they can operate in the event of fire and testing.
- 3) 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.
- 4) Floor Nos and Directional sign of escape routes should be displayed prominently (auto glow type) at all the places of the building as per clause 5.5 of the N.B. Code.
- 5) Mock fire drill and evacuation drill should be performed periodically with participation of all occupants of building. Each year a certificate is to be obtained from the appropriate authority, West Bengal Fire & Emergency services with certifying about the satisfactory services, performing of all the lift and fire safety arrangements and installation of the building. In this regards A Register should be maintained and shall be liable to produce the same to the Authorized Officer on demand.
- 6) The fire license is to be obtained from this Department after obtaining the final NOC of this building

Signature Not Verified

Digitally Signed,  
Name: SHUVRANGSHU MAZUMDER  
Date: 15-Jun-2023 13:46:35  
Reason: Approved  
Location: West Bengal

Divisional Fire Officer, Jalpaiguri  
West Bengal Fire & Emergency Services