



Government Of West Bengal
Office Of The Divisional Fire Officer, Coochbehar
West Bengal Fire & Emergency Services
Sunity Road, P.S.- Kotwali, P.O.- Coochbehar, Pin:- 736101

Date: 13-03-2023

Memo no.: FSR/0125186230400018

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

To: Dilip Pramanik
West Khagrabari Road, PO- Khagrabari, PS- Pundibari, Dist Cooch Behar, Pin-736179, Plot No-LR 4818, Khatian
No-LR-13919

Sub: Fire safety Recommendation for Proposed B+G+4 type Residential cum commercial building .Approved plan will be signed as rectified as per bld rules.

This is in reference to your application no. 0125186230400018 dated 13-02-2023 regarding the Fire safety Recommendation for Proposed B+G+4 type Residential cum commercial building .Approved plan will be signed as rectified as per bld rules.

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:

Recommendations:-As per NBC. And Risk assessment

A) Construction Part:-

- i) The whole construction of the proposed building shall be carried out as per approved plan of the Municipality/local authority & conforming the relevant building rules.
- ii) The interior finish decoration of the building shall be made of low flame spread materials conforming I.S Specification.
- iii) All construction materials should be of four hrs. Fire resisting type.
- iv) Doors & windows should be of at least 2 hrs of fire resisting type.
- v) All opening of services ducts, void, gap, joints etc. should be sealed with fire check materials.

B) Open Space & approach:-

- i) 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.
- ii) The approach roads shall be sufficiently strong to withstand the load of fire engine weighting up to 45 M.T.
- iii) The width and height of the access gates into the premises shall not be less than 4.5 meters & 5 meters respectively abutting the roads.

C) Means of escape:-

i) The Staircases of the building shall be enclosed type & construction shall be made of bricker/RCC type having fire resistance capacity not less than 4 hrs

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

iii) The width of the staircases shall be 1.25 meters. Corridors of the building and the exit doors shall conforming the relevant building rules.

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

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

vi) The staircase 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.

vii) Staircase should be free from any obstruction at all times.

D) Electrical Installation: 1946 1982-(I.S-694)

i) All electrical installation should be done in accordance with National Electrical code & part -viii "Building Service" section -2 "Electrical installation" good practice [4(10)]

ii) All cable should be of FRLS type & all wiring should be done by the copper wire along with appropriate gauge such as 1.2 sq. mm for light, fan, bulbs etc. 2.5 sq. mm for freeze, TV & 4 sq. mm for geezer, washing machine etc.

iii) Electrical installation shall be tested by the licensed Electricians.

E) External Yard hydrant System:-IS: 13039.1991:-The pillar type hydrant should be installed surrounding the building towers as per the said code of practice i.e. @ one pillar hydrant per 1000 sq. meters of floor area as per the vulnerability.

F) Alternate power supply :-Arrangement shall be made to supply power with the help of a Generator to operate at least the fire pump, pump for deep tube-well, illumination of stairs, corridors, means of escape etc. in case of normal power failure.

G) Terrace Tank:-One Terrace Tank of capacity Minimum 2500 liter should be installed in the building along with suitable terrace pump & wet riser cum down comer system.

H) Hose Reel System:-IS 884-1985, the Hose reel hose system should be provided at each floor of the building. The internal dia of the said hose reel shall be 19 mm to 32 mm and the discharge capacity not less than 22.5 LPM. While the length of the hose reel not more than 36.50 meters. The distance of such

Installation should be in such a way that no part of the floor is more than 6 meters distance from a hose nozzle when fully extended

I) Pumps for fire fighting Installation.IS-12469-1988.

i) The pump should be installed and arranged in such 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 the discharge capacity of the said pump minimum 900 liters per minutes.

ii) 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.

iii) One such pump shall always be kept on stand by preferably be of diesel driven type.

iv) All the pumps shall be incorporated with both normal and auto starting facilities, the suction of the pump shall preferably of positive type or in case of negative suction the system shall be wet riser- cum- down comers with suitable terrace pump fitted with over head tank.

J) Small gears:-I.S 903-1993- Hose box, 15 meters permoline delivery hose & gun metal short branch half inch dia @ one set each at or near all the pillar hydrant, landing valve on all floors of the building should be installed.

K) Fire Fighting Water:-The building should be provided with 20000 liters capacity of underground stored water with replenishing arrangement @ 1000 liters of water per minutes preferably from two different sources. The height of the reservoir should not be exceeding 30 cm from the ground level. Fire water reservoir shall have overflow and connected with the domestic water reservoir as well as to avoid stagnancy of water. The water reservoir shall be kept full at all times.

ii) The location of the underground reservoir should be such so that the Fire Service vehicle may get access to the site of

the reservoir with a view to draw the waters from said reservoir.

L) Internal Hydrant System:-IS:3844:1989:-Pressurized wet risers of dia 100 mm should be provided at each staircases with a provision of landing valves at each landing and half landing position of the building as per the above IS code of practice.

M) First aid fire fighting system:-IS 2190-1992(IS-15683). Sufficient Nos. of Portable fire extinguishers of ABC/ DCP type, Water type and Sand and water bucket should be provided at different places of the building and it should be within the reach of all concern as stated in the IS Code i.e. one no.@ 1000 sq.meters floor area or as per the vulnerability.

N) Lighting Protection of the Building: - This protection for buildings shall be provided as given in Part-VIII building services, section-2 electrical installation.

O) In case of Lift:-

i) The walls of the lift enclosures shall be at least two hrs. fire resisting type and collapsible gates shall not be permitted. The lift materials should be 4 hrs. fire resisting types, the door of the lift should be 1 hr. fire resisting type, the landing door should be ½ hr. fire resisting type and area of the lift should be minimum 1.4 sq.meters.

ii) The load bearing capacity of the lift should be minimum 10 persons.

iii) A sign shall be posted and maintained on every floor at or near the lift indicating that in case of fire, occupants shall use the stair unless instructed otherwise. The sign shall also contain a plan for each floor showing the locations of stairways.

P) Detection & Alarm System, Suppression system & public address system:-IS 2189-1988.

i) Sufficient Nos. of manually operated electrical fire alarm system of break glass type call boxes and fitted with alarm like hooters at each floor of the building should be installed. . The Control room shall be located at the entrance of the ground floor of the building where a panel board, resister etc. shall be available for recording different occurrence

Q) Sprinkler system:- IS-9972 all the vulnerable points/parking area/commercial area to be protected by Sprinkler system.

R) Basement of covering area less than 200 sqm shall be used only for parking of minimum 4 meter wide ramp and to be protected by auto sprinkler system with FCD in staircase and lift lobby.

S) General recommendations: -

i) Mock drill & evacuation drill should be conducted periodically & in this regard a resister for the recording of mock fire drill , evacuation drill ,testing and checking of whole fire fighting installation ,electrical installation should be maintained & shall be liable to produce the same to the authorized Officer of this department on demand.

ii) Fire notices should be provided and shall be displayed at all places of the building as per clause 5.5 of N.B C.

iii) All the occupants and other peoples shall be conversant with the installed fire fighting equipments of the building so that they can operate the same in case of exigency.

iv) Arrangement shall be made for regular checking, testing and proper maintenance of all fire fighting equipments and keep them in good working condition at all time it should be written in the Register.

v) Good housekeeping should be maintained.

vi) Parking area shall be protected by first aid fire fighting device and no storage shall be allowed.

vii) The roof of the buildings shall be free at all time.

iii) The Fire Service recommendations are issued subject to the free from any Court Case or legal re-encumbrances.

Signature valid

Digitally Signed
Name: PRODIP SARKAR
Date: 13-Mar-2024 10:54:36
Reason: Approved
Location: West Bengal

Divisional Fire Officer, Coochbehar
West Bengal Fire & Emergency Services