Government Of West Bengal
Office Of The Divisional Fire Officer,Darjeeling
West Bengal Fire & Emergency Services
Station Feeder Road, P.O & P.S Siliguri,
District: Darjeeling, Pin - 734005

Memo no.:FSR/0125186210500020

Date: 03-02-2021

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

To: SRI AJIT KUMAR SINGH SMT SEEMA DEVI SINGH
MOUZA-MANDALAGURI PLOT NO-88,89,92 RS,8245,8246,8247 LR KH NO-62/1,62/3 RS 724 735 LR WARD NO 46 P.S-PRADHANNAGAR,DIST-DARJEELING

Sub: Fire Safety Recommendation for the Proposed G+3 storied Residential building under group Residential at above noted address.

This is in reference to your application no. 0125186210500020 dated 20-01-2021 regarding the Fire Safety Recommendation for the Proposed G+3 storied Residential building under group Residential at above noted address.

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) Construction Part:-i) The whole construction of the proposed building shall be carried out as per approved plan & conforming all the relevant building rules of local authority.

ii) The floor area exceeds 750 sq.miter shall be suitably compartmented by separation walls up to ceiling level having at least two hrs. fire resisting capacity.

iii) The interior finish decoration of the building shall be made of low flame spread materials conforming I.S Specification.

iv) All construction materials should be of four hrs. Fire resisting type.

v) Door and windows should be of at least 2 hrs. fire resisting type.

vi) All opening of service ducts, void, gap, and joints 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 miters & 5 miters respectively abutting the roads.

C) Means of escape: -

i)The Staircases of the building shall be enclosed type & construction shall be made of bricked/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 miters. 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) Fire & Smoke doors at the entrance of all the staircases enclosures at each floor level shall be provided. The F.C.D shall be at least two hour fire resisting with self closing type open able in the direction of the escape.

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

vii)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.

viii) Parking area should not used for any storage.

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

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 cuppers wire along with appropriate gauge such as 1.2 esq. mm for light , fan, bulbs etc. 2.5 esq. mm for freeze, TV & 4 esq. for geezer, washing machine etc. less than 0.2M2.

iii) Electrical installation shall be tested by the licensed Electricians where as 85 % fire originated from electrical source of energy.

E) 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.

F) Fire Fighting Water: -

i)The building should be provided with 30000 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 Fire Service vehicles may get access to the site of the reservoir with a view to draw the water from the said reservoir.

G)Terrace Tank:-One Terrace Tank of capacity Minimum 20000 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 miters. The distance of such Installation should be in such a way that no part of the floor is more than 6 miters 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, 1.5 miters 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) Detection & Alarm System: Suppression system & Public address system-IS 2189-1988. 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 & connecting with audio visual panel board shall be made in Control Room as per the IS Code of practice. The control room shall be available in the ground floor.

L) Internal Hydrant System: - IS-3844:1989. Minimum two pressurized risers of 150 mm dia each should be provided at each staircase with provision of landing and half landing valves @ one such riser for each 1000 sq. miter of floor area or as per the vulnerability of the area. This system shall be designed in such a manner that it should be kept charged with water at all times and capable of discharge 2850 liters of water per minute at the ground level & 900 liters per minutes at the top most outlets of the building.

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.

M) External Hydrant System:-IS-13039-1991:-The whole area of your building is to be protected by adequate no. of pillar type hydrants system i.e. @ one pillar hydrant per 1000 sq. miters of area or as per the vulnerability of the place.

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) 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 notice for fire fighting and evacuation from the building should be provided and shall be displayed at all places of the building as per clause 5.5 of N.B C.

iii) Floor No. and Directional Sign of escape route should be displayed prominently as per clause 5.5 of the N.B Code.(Auto glow type).

iv) 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.

v) 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.

vii) Good house keeping should be maintained.

Divisional Fire Officer,Darjeeling
West Bengal Fire & Emergency Services

Memo No.:FSR/0125/18

Signature valid
Digitally signed by DEWAN LEPCHA
Date: 2021.02.03 12:33:57 IST