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

Memo no.:WBFES/H-2/D/FPO/29/13 Date: 23-11-2022

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

To: B. D. Jain Modern School
Binpatti, Near Cancer Hospital, under Khagrabari Gram Panchyat, Mouza-Khagrabari, JL No-89, Khatian No-3014, Plot No-6876,6878,6884 etc, P.S.-Pundibari, P.O-Khagrabari, Dist- Cooch Behar,Pin - 736179.

Sub: Revised Fire Safety Recommendation G+2 (Revised 2nd Floor) Educational Building B.D. Jain Modern School.

This is in reference to your application no. 0125188220400008 dated 14-10-2022 regarding the Revised Fire Safety Recommendation G+2 (Revised 2nd Floor) Educational Building B.D. Jain Modern School.

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 office is issuing **Revised Fire Safety Recommendation** in favor of the aforesaid building subject to the compliance of the following fire safety measure.

Recommendation:

A) Construction Part:-Only educational bld.
i) the whole construction of the proposed building shall be carried out as per approved plan of the Local body/authority & conforming the relevant building rules must.
ii)The floor area exceeds 500 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) Doors & windows should be of at least 2 hrs of fire resisting type.
vi) 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.

approach roads shall be sufficiently strong to withstand the load of fire engine weighting up to 45 M.T.

ne width and height of the access gates into the premises shall not be less than 4.5 miters & 5 miters respectively outting the roads.

:) Means of escape: -

)The Staircases of the building shall be enclosed type & construction shall be made of bricked/RCC type having fire esistance capacity not less than 4 hrs.

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

ii) The width of the staircases shall be 1.5 miters. Corridors of the building and the exit doors shall conforming the relevant uilding rules.

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

') There should be minimum two staircases from the terrace of the building to the ground level and it may be more if ravel distance exceeds the limit of 22.5 miters.

'i)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. It is preferable to joint all the building blocks horizontally for providing extra escape routes for he safety purpose.(For more than one block)

'ii) Every hall room, practical room, computer room should have separate entrance and exit with sufficient ventilation.

))In case of Lift:

i) the walls of the lifts enclosures shall be at least two hour fire resisting type and collapsible gate shall not be permitted. he lifts materials should be 4 hrs fire resisting type, the door of the lifts should be 1 hr fire resisting type, the landing door hould be ½ hr fire resisting type & Area of the lift car should be minimum 1.4 sq.miters.

) The load bearing capacity of the lifts should be minimum 554 kg each or more.

i) In case of failure of normal power supply it shall automatically trip over to alternate power supply. This change over of upply could be done through manually operated change over switch alternatively; the lift shall be so wired that in case of ny power failure, it comes down at the ground level and comes to stand still with door open.

v) A sign shall be posted and maintained on every floor at or near the lifts indicating that incase of fire, occupants shall use he stairs unless instructed otherwise. The sign shall also contain a plan for each floor showing the locations of the tairways.

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

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

) All cable should be of FRLS type & all wiring should be done by the cuppers wire along with appropriate gauge .

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

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

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

) The location of the underground reservoir should be such so that the Fire Service vehicle may get access to the site of ne reservoir with a view to drawn the waters from said reservoir.

Internal Hydrant System:-IS:3844:1989:- Pressurized wet 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.miters of floor area of the building or as per the vulnerability.

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 per minutes at the ground level & minimum 900 liters per minutes at the top most out lets.

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.

I) Terrace Tank:-One Terrace Tank of capacity Minimum 5000 liter should be installed in the building along with suitable terrace pump & wet riser cum down comer system.(For every block)

J) 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.

K) Pumps for firefighting 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.

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 standby preferably be of diesel driven type.

v) Provision of Jockey pump shall also be made to keep the water based system under pressurized condition at all times

vi)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.

L) Small gears:-I:S 903-1993:- Hose box, 15 miters permoline delivery hose/CRL & 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.

M) Manual Fire Alarm System, -IS 2189-1988.

i) Sufficient Nos. of manually operated electrical Fire alarm system of break glass type call boxes, with hooters etc, to be provided at different places of the building

N) External Hydrant System:-IS13039:1991:- The whole area of the building area will be protected by the Pillar type hydrant system as per the said IS code of practice to protect the Car parking area etc.

O) Sprinkler system: - All vulnerable part and parking area /Lab etc to be protected by automatic sprinkler system.

P) First aid fire fighting system:-IS 2190-1992/IS-15683. Sufficient Nos. of Portable fire extinguishers of Clean agent type ,ABC 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 esq.miters floor area or as per the vulnerability.

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

R) Gas Bank-I:S 6044-2000:

In case of any cooking gas bank, the same should be installed conforming S/L 4.1.5 & 4.1.6 of the aforesaid I:S code & Fire Service license to be obtained u/s 12 of W.B.Fire & Emergency Services Act. & W.B.F.E.S. (license) Rules 2004 for such Gas bank.

S) General recommendations:

.i)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/Fire order etc. should be provided and shall be displayed at all places of the building as per clause 5.5 of N.B

) 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) Mock fire drill and evacuation drill should be done periodically with participation of all occupants.

vii)Assembly point to be marked .

viii)For class room having more than 40 students capacity should have two exits .

ix)All seminar rooms /hall rooms should have sufficient exit .

Signature valid

Digitally Signed
Name: PRODIP [illegible]
Date: 23-Nov-2020 [illegible]:59
Reason: Approved
Location: West Bengal

Divisional Fire Officer,Coochbehar
West Bengal Fire & Emergency Services