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/20182019/16644 DATE: 27/11/2018

From :
The Director
Fire Prevention Wing,
West Bengal Fire & Emergency Services.

To :
Vedant Sureka
Mouza - Baikunthapur, J.L. No. - 36, Dag Nos. - 3-12, 16-23, 26-31, 37-42, 46, 49, 52, 53, 68 under Hariharpur Gram Panchayet, South 24 Parganas, West Bengal.
Baruipur F.S., Baruipur,
South 24 Parganas - 743383 .

Sub :Fire Safety Recommendation for Proposed Residential Complex of G+20 (4 Nos.) & G+18 (4 Nos.) Buildings, 1 No. Basement, 1 No. Podium, & 1 Nos. MLCP of 4 Storied under group Residential Building situated at Mouza -Baikumthapur, J.L. No. 36, Dag Nos. 3-12, 16-23, 26-31,37-42, 46,49, 52,53,68 PS- Baruipur, Under Hariharpur Gram Panchayat, Dist South 24 Parganas- 743383.

This is in reference to your Application No. IND/WB/FES/20182019/16644,dated 27/11/2018, regarding the Fire Safety Measure for Proposed Residential Complex of G+20 (4 Nos.) & G+18 (4 Nos.) Buildings, 1 No. Basement, 1 No. Podium, & 1 Nos. MLCP of 4 Storied under group Residential Building situated at Mouza -Baikumthapur, J.L. No. 36, Dag Nos. 3-12, 16-23, 26-31,37-42, 46,49, 52,53,68 PS- Baruipur, Under Hariharpur Gram Panchayat, Dist South 24 Parganas- 743383..

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 part:

i)The whole construction of the building shall be carried out as per approved plan and conforming by the relevant building rules of local authority.

ii)All the compartment walls up to ceiling level having at least two hours fire resisting capacity.

iii)All construction materials should be of two hrs. fire resisting capacity.

iv)Doors and windows should be of at least two hrs. fire resisting type.

v)Provision of ventilation of the central core duct shall be provided.

vi)The interior finish decoration of the building shall be made low flame spread materials conforming IS specification.

v)The roads and Side Open Spaces are to be minimum 45 MT withstand capacity.

B)Open space & approach:-

i)The approach roads shall be sufficient to permit the accessibility and maneuverability of fire appliance to turning facility and to be strong enough to withstand the load of fire engine weighting up to 45 metric ton.

ii)The width and height of the access gate into the premises shall not be less than 4.5 meters 5 meters respectively abutting the roads.

iii) The driveway shall not be used as car parking.

C)Staircase:

i)The staircase of the building shall be enclosed type. Entire construction shall be made of bricks having Fire Resisting Capacity not less than Two Hours.

ii)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.

iii)The width of the staircase, corridors and exit doors shall conforming the relevant building rules with up to date amendments.

iv)The entire staircase shall be extended up to terrace of the building and shall be negotiable to each floor.

v)Fire and smoke doors at the entrances of all the staircase enclosures at each floor level shall be provided. The FCD shall be of at least one hour Fire Resisting wire glass window fitted with self-closing type openable in the direction of escape.

D)Lift:

i)The walls of the lift enclosure shall b at least two hours Fire resisting type. Collapsible gate shall not be permitted.

ii)One of the lift shall be designed for Fire Lift. The word “FIRE LIFT” shall conspicuously written at ground floor.

iii)Lift and Lift Lobby communicate to the basement shall have to be pressurized as per guide line of N.B.C –IV, Annex. ‘C’.

E)Means of escape:

i)The emergency exit shall not be allowed to lock and key round the clock.

ii) The walls of the lift enclosure shall be at least two hours fire resisting type. Collapsible gate shall not be permitted.
iii) One of the lift shall be designed for Fire lift.
iv)Time of evacuation should be as per IS: 1644-1988.

F)Electrical installation:
i)All electrical installation should be done in accordance with National Electrical Code and Part- VIII “Building Services” Section-2 “Electrical installation” good practice[4(10)]
ii)All cables should be FRLS type and all wiring along with appropriate gauge and resistance conforming the machineries to be used.
iii)Electrical installation should be tested by the licensed electricians periodically.
iv)Electrical installation shall be adequately protected with CO2/DCP or Medium velocity/ Protector system.
G)Intelligent Analogue System:
i) Auto Fire Alarm system with analogue addressable smoke /Heat detector as per suitably shall be installed in each floor.
ii) Addressable analogue manual call point incorporating with sounders shall be installed in all floor area of the building in such a manner that maximum travel distance shall not be more than 22.5 m. in order to reach any of the call point.
iii) Addressable analogue based fire alarm panel shall be installed and all shall also be connected with main panel at the Fire Control Room of the premises having direct dialing facility to the local fire service.
iv) Both way public address system shall be made available in all floors of the building. The system shall be connected to the Main Control Room.
v) All the installation shall also be satisfied the IS specification 2189 (as amended and the code of practice as laid down in the N.B.C Part-IV.
H)Gas Bank’s 6044-2000 (if any):
In case of gas bank, the same should be installed conforming S/L 4.1.5 & 4.1.6 of the aforesaid IS code of practice and Fire service license to be obtained for such LPG gas bank.
I)Fire fighting water:
The building should be provided with 3,00,000 liters capacity of underground water reservoir and Over Head Water Reservoir of 15,000 Lts in each Tower with replenishing arrangement @ 1000 liters per minutes. The underground water reservoir location should be such so that fire service vehicle may get access and draw water from the said reservoir.
J)Small gears: IS:903-1993:-
Hose box, 15 meter length permoline delivery hose, gunmetal short branch of half inch dia. one set at each pillar hydrants should be installed.
K)External Hydrant System:- IS-13039:1991-
The whole area of the building is to be protected by adequate no. of pillar type hydrants system (at 150 mm internal dia. Pipe line) i.e. one pillar hydrant per 1000 sq. meter of area or

as per the vulnerability of the place.

L)Internal Hydrant/ Wet Riser System IS-3844:1989:-

The building shall be provided with Wet Riser of 150 mm internal diameter pipeline with provision of landing valves at the staircase landings/ half landings at the rate of one such riser for 1000 Sq.mtr. of floor area. The system shall be so designed that kept charged with water all the time under pressure and capable of discharge 2850 ltrs./min. at the ground floor level outlet and minimum 900 ltrs./ min. at the top most furthest outlet. In both cases the running pressure shall not be less than 3.5 kgs./ Sq.mtr.. All other requirement shall conform I.S. 3844-1989.

M)Hose reel system(IS:844-1985):

The building should be equipped with Hose Reel Hose system as per IS code of practice. 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 36.5 meters. The distance of such installation should be in such a way that no part of floor is more than 6 meters distance from a nozzle when fully extended.

N)Pumps for firefighting installation IS-12469:1988:-

i)Two electric and one diesel driven pump of capacity 2850 litre/min and one electric pump of capacity 180 litre/min should be installed and arranged in such a manner so that it will start automatically due to fall in pressure by installing a jockey pump.

ii)All the pump shall be designed so as to supply water 900 LPM at a pressure 3.5 kg/cm2 at the furthest point.

iii)Electrical and diesel driven arrangement for stand by fire pump shall be ensured.

iv)A separate fire pump shall have to be made for the total sprinkler installation of the building. All the pumps shall be incorporated with both manual and automatic starting facilities. The suction of pumps shall preferably of positive type or in case of negative suction the system shall be wet riser cum down comer with suitable terrace pump with overhead tank.

O)Sprinkler Protection IS-15105: -

The automatic sprinkler system shall be provided at all floors including corridors and basement as per IS 9972. Alarm gang to be incorporated along with the sprinkler system. The sprinkler system shall be connected with the existing system of the building if required pressure is present at the furthest point.

P)Multilayer Car Parking (MLCP):-

MLCP shall be protected with Medium Velocity Water Spray Projector System.

Q)Alarm System: -

Manually operated electrical fire alarm system should be installed covering the entire area.

N)Air Conditioning System(if any)

i) The A.H.U shall be separated for each floor with the system Air ducts for individual floors.

ii) Arrangement shall be made for isolation at the strategic locations by incorporating auto dampers in the air conditioning system.

iii) The system of auto shut down of A.H.U shall be incorporated with detection and Fire alarm system.
iv) The air handling unit room shall not be used for storage of any combustible materials.
R)First Aid Fire Fighting System:-
First Aid Fire Fighting arrangement in the style of placing suitable type of portable fire extinguisher , Fire buckets etc. in all floors and vulnerable locations of the premises shall be made in accordance with IS 2190-1992.
S)Alternative power supply:
Arrangement shall have to be made to supply power with the help of a generator to operate at least the fire pump, fire alarm system and also for illumination in case of normal power failure.
T)Refuge Area: - The Refuge Area shall have to be protected with 120 min fire barrier.

U) General recommendation:-
1.Fire notice for fire fighting and evacuation from the building shall be prepared and to be displayed at all vulnerable places.
2.Floor numbers and directional sign of escape route shall be displayed prominently.
3.The employees and security staff shall be well conversant with the installed fire fighting equipments of the building and to operate in the event of fire and testing.
4.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 good working condition at all times.
5.Mock fire practice and evacuation drill shall be performed periodically with participation of all occupants of building.
6.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.

This shall be treated as Fire Safety Recommendation. 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

Signature Not Verified
Digitally signed by ABHIJIT PANDEY
Date: 2018.11.27 19:24:17 IST