

**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/20192020/71346

DATE: 03/03/2020

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

To :
SRI MAINAK SEN, (PARTNER)
6, NABAPALLY MAIN ROAD
Garden Reach F.S., Haridevpur,
Kolkata - 700104 .

Sub :Fire Safety Recommendation for a proposed construction of G + 7 storied building under group Residential at the premises no.- 6, NABAPALLY MAIN ROAD, Haridevpur, Kolkata - 700104

This is in reference to your Application No. IND/WB/FES/20192020/71346, dated 03/03/2020, regarding the Fire Safety Measure for a proposed construction of G + 7 storied building under group Residential at the premises no.- 6, NABAPALLY MAIN ROAD, Haridevpur, Kolkata - 700104.

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 shall be carried out as per the approved plan.
- ii)All the compartment walls up to ceiling level having at least four hours fire resisting capacity.

- iii) All construction materials should be of four 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.

B. Staircases:

1. Provision of natural ventilation shall be made at stairwell.
2. Staircases shall not be obstructed anywhere by any means and negotiating on every floor.
3. FCDs shall be installed as per the approved plan drawing.

C. Lifts :

1. Collapsible gates shall not be permitted with the lift cars & shall have solid doors.
2. Lift shall not be used as a means of escape during fire situation.
3. Fire lift
Fire lift shall be provided & in case normal power failure, it shall automatically trip over to alternate power supply. The word "fire lift" shall be conspicuously displayed in fluorescent paints on lift landing door at each floor level.

D. Service ducts/ shaft :

Service ducts & shaft shall be enclosed by walls of 2 hrs. & door 1 hr fire rating. All such ducts shall be properly sealed & fire stopped .at all floor level, vent opening at the top of the service ducts shall also to be provided .

E. Electricity :

1. The electric distribution cable/ wiring shall be laid in separate duct .The duct shall be sealed at every floor with non combustible materials.
2. Telephone lines, water mains, gas pipes or any other service lines shall not be laid out in the duct for electrical cables /wires.
3. The electrical installation including Transformer, switch gear, main & meter of the premises shall be provided in separate enclosures apart from main building in accordance with IS 1946:1982.
4. Separate circuit for fire fighting, fire lift, stairs case & corridor lighting system shall be provided.

G. Alternative power backup system :

A stand by diesel generator of suitable capacity shall be installed to supply powers to staircases & corridor lighting , fire lifts ,illuminating escape routes , stand by fire pump, pressurization fans /blowers ,smoke extraction system & damper system in case of normal power failure

H. Alarm & Detection system :

M.C.P shall be installed near staircases, escape route and at all strategic locations.

I. Fire Fighting (Protection) :

i) Fire fighting water:

The building shall be provided with 1,00,000 liters capacity of underground water reservoir and 20,000 ltrs. Overhead water reservoir on each block 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.

ii) 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.

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

The building shall be provided with Wet Riser System 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 900 ltrs./min. at the terrace level outlet. The running pressure shall not be less than 3.5 kgs./ Sq.mtr.. All other requirement shall conform I.S. 3844-1989.

v) 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.

vii) Pumps for fire fighting installation IS-12469:1988:-

- One Jockey of 180 LPM, one no. main pump of 2850 LPM, and one no. diesel driven stand-by pump of capacity 2850 LPM shall be installed and arranged in such a manner so that it will start automatically due to fall in pressure.
- All pumps shall be designed so as to supply water 900 LPM at a pressure 3.5 kg/cm² at the furthest point.
- Only Diesel driven arrangement for stand by fire pump shall be ensured.

K) 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 (e.g. pump house etc.) of the premises shall be made in accordance with IS 2190-1992.

L. General Recommendations :

1. Telephone nos. of all emergency services, fire notice / fire order shall be pasted at all strategic locations on each floor of the building.
2. Floor number & directional sign towards the routes of escape during emergency shall be provided at all conspicuous places on each floor.
3. All Occupants & security staff shall be conversant with the installed fire fighting system & equipments & to operate them efficiently in case of any fire emergency.
4. Mock Fire & Evacuation drill shall be conducted at least twice in a year with the participation of all concerned.
5. Arrangement shall be made for checking, testing & proper maintenance of all inbuilt fire & life safety system & equipments at recommended periodical intervals by competent agency.
6. Good housekeeping to eliminate fire hazards both inside & outside the building shall be strictly maintained. Under no circumstances the corridors, routes of escape, lobbies of staircases and landings be blocked by waste / refused materials in order to ensure easy & smooth evacuation of the occupants as well as free access / movement of fire fighting team during fire emergency.
7. Lightning arrestor shall be installed on the roof top to protect the building from thunder crash.

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 valid
Digitally signed by TARUN
KUMAR SINHA
Date: 2020.03.03 15:24:52 IST