

# Government Of West Bengal Office Of The Director General West Bengal Fire & Emergency Services 13D, Mirza Ghalib Street, Kolkata - 16

Memo no.:FSR/0125186241000038 Date: 18-03-2024

From:

Director

Fire Prevention Wing,

West Bengal Fire & Emergency Services

To: PROTHAMA LIFESPACE

HOLDING NO.-50 OF R.N. TAGORE ROAD, PLOT NO.-9934,9956,9957,9958,9960,9961, WARD NO.-07, JL NO.-92, KHATIAN NO.-56148, MOUZA - KRISHNANAGAR, P.S.- KOTWALI, UNDER KRISHNANAGAR MUNICIPALITY, DIST.-NADIA. PIN - 741101

Sub: Fire Safety Recommendation for proposed B+G+VI storied under group of residential building at premises no. Holding No.- 50 of R.N. Tagore Road, L.R. Plot No.- 9934, 9956, 9957, 9958, 9960, 9961, R.S. Plot No.- 7069, 7046, 7071, 7072, 7074, 7040, Ward No.- 07, J.L. No.- 92, Khatian No.- 56148, Mouza- Krishnanagar, P.S.-Krishnanagar (Kotwali) within Krishnanagar Municipality, Pin.- 741101, Dist.- Nadia.

This is in reference to your application no. 0125186241000038 dated 31-01-2024 regarding the Fire Safety Recommendation for proposed B+G+VI storied under group of residential building at premises no. Holding No.- 50 of R.N. Tagore Road, L.R. Plot No.- 9934, 9956, 9957, 9958, 9960, 9961, R.S. Plot No.- 7069, 7046, 7071, 7072, 7074, 7040, Ward No.- 07, J.L. No.- 92, Khatian No.- 56148, Mouza- Krishnanagar, P.S.- Krishnanagar (Kotwali) within Krishnanagar Municipality, Pin.- 741101, Dist.- Nadia.

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:

- 1.MATERIALS FOR RAPID FLAME SPREAD CATEGORIES INCLUDING UNTREATED WOOD FIBER BOARD ETC. SHALL BE NOT USE.
- 2.THE DOORS AND WINDOWS PREFERABLY SHALL BE MADE OF METAL.
- 3.THE INTERIOR FINISH DECORATION OF THE BUILDING SHALL BE MADE WITH THE MATERIALS WITH LOW FLAME SPREAD AND LOW SMOKE AND TOXIC GAS GENERATING CATEGORIES CONFORMING I.S. SPECIFICATION.
- 4.ARRANGEMENT SHALL HAVE MADE FOR SEALING ALL THE VERTICAL SERVICE DUCTS BY THE MATERIALS OF ADEQUATE FIRE RESISTING CAPACITY.

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5.. ALL SUCH DUCTS SHALL BE PROPERLY SEALED AND FIRE STOPPED AT ALL FLOOR LEVEL.

**B.OPEN SPACE & APPROACH:** 

- 1.THE OPEN SPACE SURROUNDING THE BUILDING SHALL BE KEPT CLEAR OPEN TO SKY AND SHALL CONFIRM THE RELEVANT BUILDING RULES AS WELL AS PERMIT THE EASY ACCESSIBILITY AND MANEUVERABILITY OF THE FIRE APPLIANCES WITH TURNING FACILITY.
- 2.THE APPROACH ROAD AND ROADS SURROUNDING THE BUILDING SHALL BE SUFFICIENTLY STRONG TO WITHSTAND THE LOAD OF FIRE ENGINE WEIGHTING UP TO 45 M.T.
- 3.THE WIDTH AND HEIGHT OF THE ENTRY GATES TO THE PROMISES SHALL NOT BE LESS THAN 4.5M AND 5M RESPECTIVELY.
- 4.DRIVEWAY SHOULD BE FREE OF ANY TYPE OBSTRUCTION. NO PARKING WILL BE ALLOWED ON THE DRIVE WAY.

## C.STAIRCASE:-

- 1.THE STAIRCASES SHALL HAVE PERMANENT VENTS AT THE TOP EQUAL TO 5% OF THE CROSS SECTIONAL AREA OF THE STAIRCASES ENCLOSURES AND OPEN ABLE SASHES AT EACH FLOOR LEVEL EQUAL TO 15% OF THE SAID CROSS SECTION ARE SHALL HAVE TO BE PROVIDED IN THE EXTERNAL WALL OF THE BUILDING.
- 2.ALL THE STAIRCASE OF THE BUILDING SHALL BE NEGOTIABLE TO EACH OTHER IN EACH FLOOR WITHOUT ENTERING INTO ANY ROOM AND SHALL BE EXTENDED UP TO RESPECTIVE TERRACE.
- 3.THE ROOF OF THE STAIR WALL SHALL BE 1M ABOVE THE SURROUNDING ROOF AREA.
- 4.THE WIDTH OF THE STAIRCASES AND CORRIDORS AND TRAVEL DISTANCE OF DIFFERENT CATEGORIES OF OCCUPANCIES SHALL HAVE TO CONFORM THE RELEVANT BUILDING RULES.
- 5.CONSIDERING THE STAIRCASES ARE ONLY MEANS OF EVACUATION, EMERGENCY LIGHTING ARRANGEMENT DIRECTIONAL, EXIT, SIGN ETC. SHALL BE MADE CONFORMING THE RELEVANT I.S. CODE IN THIS REGARDS. D.LIFT:-
- 1.THE WALLS OF THE LIFT ENCLOSURE OF THE BUILDING SHALL BE AT LEAST TWO HOURS FIRE RESISTING TYPE RESPECTIVELY MARKED IN THE PLAN WITH THE EVENT AT TOP OF AREA NOT LESS THAN 0.2M2.
- 2.THE ELECTRIC POWER SHALL BE FROM SEPARATE SUPPLY MAINS IN THE BUILDING AND CABLES RUN WITH IN THE LIFT SHAFTS, LIGHT AND FANS IN THE LIFT CARS SHALL BE OPERATED FROM 24 VOLTS, SUPPLY ON EMERGENCY IN CASE OF FAILURE OF NORMAL POWER SUPPLY LIFT SHALL AUTOMATICALLY TRIP OVER ALTERNATE POWER SUPPLY.
- 3.EXIT FROM THE LIFT LOBBY IF LOCATED IN THE CORE OF THE BUILDING, SHALL BE THROUGH A SELF-CLOSING SMOKE STOP DOOR OF 1HOUR FIRE RESISTANCE.
- 4.COLLAPSIBLE GATE SHALL NOT BE ALLOW.
- 5.ALL OTHER REQUIREMENTS SHALL CONFORM THE I.S. SPECIFICATION INCLUDING THE COMMUNICATION FACILITY IN THE LIFT CARS CONNECTING TO THE FIRE CONTROL ROOM OF THE BUILDING.

# **BASEMENT:**

- 1. The basement shall be adequately ventilated.
- 2.Ramp of the basement to be provided as per norms.
- 3.Basement shall not be used for other purpose except car parking.
- 4.The basement shall be protected auto sprinkler system if area exceeding 200 sq.m&, hydrant system and Hose Reel system installed as per I.S specification.
- 5.Mechanical extractor for smoke venting system shall be provided if natural ventilated not appropriate inside the basement.
- 6. The system shall be of such design as to operate on actuation of smoke detector automatically.
- 7. Mechanical extractor shall have an alternative source of supply.
- 8.All principal staircases shall not be permitted from the Basement, so one no. extra staircase shall have to be provided from basement to ground floor.

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9.If not provided then this staircase shall have to enclosed or segregated basement with ground floor as per IS specification.

### A.FIRE FIGHTING WATER:

- 1.Under Ground Water Reservoir of 50,000 ltrs& overhead water reservoir 10,000 ltrs marked only for fire fighting purpose.
- 2. Capacity for entire project exclusively for Fire Fighting purpose with replenishing arrangements @1000 ltrs/min. preferably from two different sources of water shall be provided.
- 3. The water reservoirs shall have overflow arrangement with the domestic water reservoir as well as to prevent stagnancy of water.
- 4. The water reservoirs shall be kept full at all time.

### **B.WATER LAYOUT SYSTEM:-**

- 1.The system shall be so designed that shall be kept charged with water all the time under pressure and capable to discharge 1620 lts/min and running pressure shall not be less than 3.5Kgs/Sq.cm. at any point. Of the building.
- 2.All other requirements shall conform I.S. 3844 1989.
- 3.Ring Main 100 mm internal diameter pipe line with provision of adequate numbers of Yard Hydrants with necessary accessories.
- 4.Provision of at least two numbers fire service inlet shall be installed surrounding the premises in accordance with relevant I.S. specifications.
- 5. Hose reel hose shall have to install in the building as per suitability.
- 6.Landing valve with all accessories (like as hose box, hose with branches) shall have to installed as per suitability.

# C .WET RISER CUM DOWN COMER & HOSE REELS SYSTEM :-

- I.THE BUILDING100 mm wet riser with all accessories shall have to provide as per suitability.
- II.WITH PROVISION OF OUTLETS IN EACH FLOOR AT THE STAIRCASES LANDINGS/HALF LANDINGS ALONG WITH ALL ACCESSORIES AS PER I.S. SPECIFICATION WITH SUITABLE PLACE.

# HOSE REEL UNIT: -

- 1.PROVISION OF HOSE REEL UNITS ON SWIVELING DRUM IN CONJUNCTION WITH DOWN COMER NEAR EACH LANDING VALVES SHALL BE MADE AT EACH FLOOR LEVEL OF THE BUILDING.
- 2.PROVISION OF LANDING VALVE WITH ALL ACCESSORIES AT THE EACH FLOOR STAIRCASES LANDING/HALF LANDING AS PER SUITABILITY.
- 3.ALL OTHER REQUIREMENTS OF THE WATER BASE FIRE PROTECTION SYSTEM SHALL BE MADE AS PER I.S. SPECIFICATION 3844-1989 (WITH UP TO DATE AMENDMENT).

# 4.FIRE PUMP:-

- 1.Provision of the Fire Pumps capable to discharge 1620LPM shall have to be made to supply water at the rate-designed pressure and discharge into the Water based system which shall be installed in the respective pump room.
- 2.One such pump same capacity of main pump shall always be kept on stand-by preferable diesel driven type.
- 3. Provision of Jockey Pumps shall also have to be made to keep the water-based suppression systems under pressurized condition at all the time as per IS specification.
- 4. All the pumps shall be incorporated with both manual and auto starting facilities.
- 5. The suction of pumps shall preferably of positive type or in case of negative suction the system shall be wet riser-cumdown comer with suitable terrace pump with overhead tank.
- 6. The Fire Pumps shall be multi stage and multi outlet creating pressure zones.
- 7. The Number and type of fire pumps shall be as per provision of N. B. C. Part IV, 2016.
- 8. The Fire Pumps shall be multi stage and multi outlet creating pressure zones.

### SPRINKLER INSTALLATION:-

The automatic Sprinkler installation shall have to be provided in entire basement, covered car parking and alarm gang to be incorporated along with the sprinkler system. Sprinkler test line shall have to be provided.

## E. ELECTRICAL INSTALLATION & DISTRIBUTION: -

- 1. The electrical installation including transformers, Switch Gears, Main & Meters etc. and the distribution system of the premises shall be made satisfying the code of practice for Fire safety in general buildings as laid down in I.S. specification 1946 1982.
- 2. Electrical distribution system shall conform all the requirements as laid in I. S. 1646-1982.
- 3. The electrical installation shall be adequately protected with automatic CO2/D.C.P.
- 4.All electrical installation viz. Transformer Switch Gear L.T., H. T. rooms shall be protected with both auto detection and suppression systems as per suitability.
- 5. Alternative Power Supply: -

Arrangements shall have to be made to supply power with the help of a generator to operate at least the Fire Pump, Pump for deep Tube-well, Fire Alarm System, etc. and also for illuminating the Staircase, corridors etc. and other places of the buildings in case of normal power failure.

### F. MCP & ALARM SYSTEM:-

- 1.Manually operated Electrical Fire Alarm system with at sufficient numbers of break glass type call boxes fitted with Hooters along with public address system, at each floor connecting with audio-visual panel board shall be made in Control Room.
- 2.The Control Room shall be located at the entrance of Ground Floor of the occupancy, other requirements of the system shall be made conforming I.S. 2189 1988.

#### **G.OTHER PROTECTION MEASURES:**

Close circuit T.V. shall have to be provided in the building.

## i. FIRSTAID FIRE FIGHTING SYSTEM:

First Aid firefighting arrangement in the style of placing suitable type of portable Fire Extinguishers, Fire buckets etc. in entire occupancy, Gas Bank (if any) and vulnerable locations of the premises shall be made in accordance with I.S. 2190-92.

## ii.GENERAL RECOMMENDATIONS:

- 1. Fire License shall have to be obtained for proposed storing and processing with L.P.G. and other highly combustible articles.
- 2. Separate LPG Gas Bank shall have to be constructed & maintained if required and protected with auto suppression and detection system.
- 3. Fire kiosk shall have to be installed with all accessories as per suitability.
- 4. Fire Notice for Fire Fighting and evacuation from the occupancy shall be prepared and be displayed at all vulnerable places of the premises.
- 5. Disposable type B. A. Musk to be kept always for emergency fire situation.
- 6.A crew of trained Firemen under experienced officers shall be maintained round the clock for safety of the entire occupancy.
- 7. Floor marking shall have to be displayed as per suitability area.
- 8. Directional sign of escape route shall be displayed prominently.
- 9. The occupancy and security staff shall be conversant with installed Fire Fighting equipment's of the occupancy and to operate in the event of Fire and Testing.
- 10. Arrangement shall be made for regular checking, testing and proper maintenance of all the Fire Safety installation and equipment's installed in the entire occupancy to keep them in perfectly good working conditions at all times.
- 11. Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of buildings.

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 entire occupancy.

N.B.:Any deviation and changes the nature of use of the buildings 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