



**Government of West Bengal
Office of the Divisional Fire Officer**

**West Bengal Fire & Emergency Services
First Floor of Duragapur Fire Station, Durgapur City Centre, P.O:- Durgapur, P.S:- Durgapur, Pin:- 713216**

Memo No.: FSR/211862506300011660

Date : 30-03-2025

**From :
Divisional Fire Officer
Paschim Bardhaman
West Bengal Fire & Emergency Services**

**To :
Debesh Mukherjee
At Purulia Ranchi Road, Opp-AG Church School, Ward-04, H No.- 380 ,P.O:Purulia ,Dist-Purulia**

Sub: Issuance of Fire Safety Recommendations for the proposed one Block of B+G+4 storied building under group Mercantile cum Business in favour of 'Debesh Mukherjee.', situated at the premises no. At Purulia Ranchi Road, Opp-AG Church School, Ward-04, H No.- 380, R.S. Plot no. 5244, Kh no. 3785, JL no. 02, Mouza- Purulia, P.O:Purulia, Dist-Purulia, PIN 723101, West Bengal..

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This is in reference to your AIN 211862506300011660 dated 18-Feb-2025 regarding Issuance of Fire Safety Recommendations for the proposed one Block of B+G+4 storied building under group Mercantile cum Business in favour of 'Debesh Mukherjee.', situated at the premises no. At Purulia Ranchi Road, Opp-AG Church School, Ward-04, H No.- 380, R.S. Plot no. 5244, Kh no. 3785, JL no. 02, Mouza- Purulia, P.O:Purulia, Dist-Purulia, PIN 723101, West Bengal.

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 Fire Safety Recommendation in favor of the aforesaid building for compliance of the following fire safety measure.

Recommendation :

A. CONSTRUCTION:

1. Materials for rapid flame, toxic smoke / fumes spread materials / categories including untreated wood fiber board etc. shall not be used.
2. The whole construction of the proposed building shall be carried out as per approved plan drawings conforming the relevant building rules of local Municipal Body /Kolkata Municipal



3. The floor area exceeds 750 Sq. Mts. shall be suitably compartmented by separation walls up to ceiling level having at least two hours Fire resisting capacity.
4. The interior finish decoration of the building shall be made with low flame spread materials conforming I.S. specifications.
5. Provision of ventilation at the crown of the central core-duct of the building shall be provided.
6. Arrangements shall have to be made for sealing all the vertical and horizontal ducts by the materials of adequate Fire resisting capacity & the doors of service ducts / shafts of 2 hr. fire rating.

B. OPEN SPACE & APPROACH:

1. The open space surrounding the building shall be kept clear open to sky and shall conform the relevant building rules as well as permit the easy accessibility and maneuverability of Fire appliances with turning facility.
2. The approach roads & internal drive ways shall be sufficiently strong to withstand the load of Fire Engine weighting up to 45 M.T.
3. The width and height of the access gates into the premises shall not be less than 4.5 Mts. and 5 Mts. respecting the abutting road.

C. STAIRCASE:

1. The staircases of buildings shall be enclosed type. Entire construction shall be made of bricks/R.C.C. type having Fire resisting capacity not less than 4 hours.
2. 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.
3. The width of the staircases shall be made as marked in the plan. Corridors and the exit doors shall conforming the relevant building rules with up to date amendment.
4. All the staircases shall be extended up to the terrace of the building and shall be negotiable to each other without entering into any room.
5. All principal staircases from ground to top floor and all the staircases from basement to ground floor shall be pressurized as marked in the plan. A positive pressure of 50 pa. shall be maintained inside the staircases. Pressurization system shall operate automatically / manually on actuation of fire alarm system & sprinkler system.
6. Fire and smoke doors at the entrances of all the staircase enclosures as marked in the plan at each floor level shall be provided. The F.C.D. 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:

1. The walls of the lift enclosure shall be at least two hours Fire resisting type. Collapsible gate shall not be permitted.
2. One of the lift shall be designed for Fire Lift. The word "FIRE LIFT" shall conspicuously written at ground floor.
3. One of the lift car of the building shall be large enough to accommodate standard Ambulance Stretcher and Medical Attendants.



operate on actuation of Sprinkler or Fire Alarm.

5. Exit from the lift body if located in the core of the building, shall be through a self-closing smoke stop door of 1 hour fire resistance.

6. All other requirements shall conform the I.S. specification including the communication facility in the lift cars connecting with the Fire Control Room of the building.

7. Alternate source of power supply shall be provided for all lifts through manually operated change over switch.

8. Lift shall not normally communicate with the basement. If however, lifts are in communication with the lift lobby of the basement; shall be pressurized as in(g) &(h) of Annex- C of N.B.C. Part – IV.

9. The Speed of the fire lift shall be such that it can reach the top floor from ground level within One minute.

E. BASEMENT:

1. The Basement shall be adequately ventilated with aggregate cross sectional area of not less than 2.5% of the area spread evenly round the perimeter of the basement shall be provided in the form of grills.

2. The exit from the basement shall be form open Air and from any points the travel distance shall not exceeds 18.5 M to reach any exit.

3. The entire basement shall be protected with Auto Sprinkler System / Hose Reel Hose conforming to I.S. 3844-1989.

4. The staircase of basement shall be of enclosed type having Fire resistance of not less than 4 hrs. and shall be situated at the periphery of the basement to be entered at ground level only from the open air and in such position that smoke from any Fire in the basement shall not obstruct any exit having the ground & upper floor of the building.

5. If cut-outs are provided from basement, all side cut-outs openings in the basement shall be protected by sprinklers at close spacing as per N.B.C. Part- IV.

F. FIRE FIGHTING WATER:

1. Underground Water Reservoir exclusively for Fire Fighting operation having minimum Capacity of 100000 Liters is to be kept full at all time.

2. Overhead Water Reservoirs for Fire Fighting shall be kept full at all time of Capacity 20000 Liters in roof.

3. The Fire water reservoir shall have overflow arrangement with the domestic reservoir to avert stagnancy of water.

4. Provision of necessary manhole shall be made on the top of the reservoir as per specification.

5. Provision of replenishment at the rate of at least 2000 Its./min. from two separate source of water supplies shall be made.

6. The deep tube wells for the replenishment of the reservoir shall be incorporated with the auto starting facility with the actuation of auto detection and suppression arrangement of the premises and shall also be connected with dual power supply units.



water in case of emergency.

G. WATER LAYOUT SYSTEM :

a. Ring Main Hydrant System :

1. 150 mm diameter Ring Main water layout arrangement along with adequate nos. 3 way Fire Service inlet covering the entire premises of the site with provision of Pillar type Yard Hydrants with door Hose Boxes, containing 2 lengths of 63mm delivery hose and short branch pipe shall be provided at all the strategic location surrounding the building along with adequate nos. Fire Service inlet to be installed conforming I. S. 3844 – 1989 (up to date amendment).
2. The system shall be so designed that shall always be kept charged with water under pressure and capable to discharge min. 900 lts. / min. at the pressure 3.5kg / sq.cm. at any point.

b. Wet Riser & Hose Reels System :

1. The building shall be provided with Wet Riser and Hose Reel unit provision of outlets in each floor at the staircases landings / half landings as per suitable at the rate of one such Wet Riser and Hose Reel per 1000sq.m. of floor area.

All other requirements of the water base Fire Protection System shall be made as per I. S.

H. SPRINKLER INSTALLATION :

1. The Automatic Sprinkler installation shall be provided in Basement area, all Mercantile floors, all business floors Corridors of residential floors of the building as per I.S. 9972. Alarm gang to be incorporated along with the sprinkler system.

I. FIRE PUMP :

Required number of Sets of Fire Fighting Pumps as per following Set shall be installed:

1. Main Pump: 1 number with specifications: Capacity: 2280 LPM, Driven by: Electric.
2. Sprinkler Pump: 1 number with specifications: Capacity: 2280 LPM, Driven by: Electric.
3. Jockey Pump: 1 number with specifications: Capacity: 180 LPM, Driven by: Electric.
4. Standby Pump: 1 number with specifications: Capacity: 2280 LPM, Driven by: Diesel.

Pumps should be operated with both Automatic Panel system and manual system.

J. 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 building as laid down in the I.S. specification 1946-1982.
2. The vertical ducts shall be supply sealed at alternative floor level.
3. The electrical installation shall be adequately protected with DCP Modular system.
4. Alternative Power Supply :

Arrangements shall have to be made to supply power with help of a generator to operate at



Staircase, Corridors etc. and other places of assembly of the building in case of normal power failure.

K. DETECTION, ALARM AND SUPPRESSION SYSTEM :

1. Manually operated Electrical Fire Alarm System with at least three numbers of break glass type call boxes fitted with Hooters along with public address system, talk back system at each floor connecting with audio-visual panel board shall be made in Control Room. The Control Room shall be located at the entrance of Ground Floor of the building, other requirements of the system shall be made conforming I.S. 2189-1988.
2. Auto fire detection system with the help of Heat and smoke detector shall be installed in all mercantile and business floors of the building. The system shall also be made in places of rooms where valuable articles have been kept. The other requirements of the system shall be made in accordance with I.S. 2189-1988.
3. The suppression system shall be made with DCP Modular or total flooding system with CO₂ /F.M.-200 particularly in computer and Electrical processing and data room and in a room of irreplaceable articles.
4. Hooter will be sounded in such a manner so that an operation of a Detector or Manual Call Point Hooters will sounded on the same floor and immediate alternate floor.
5. Public Address System :
Public Address System linked between all floors and Control Room shall have to be established.

L. FIRST AID FIRE FIGHTING SYSTEM :

First Aid Fire Fighting arrangement in the style of placing suitable type of portable Fire Extinguishers, Fire Buckets etc. in all floors and vulnerable locations of the premises shall be made in accordance with I.S. 2190-1992.

M. 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. Fire Notice for Fire Fighting and evacuation from the building shall be prepared and be displayed at all vulnerable places of the building so that all people connected with the building shall be acquainted with their contents.
3. Floor numbers and directional sign of escape route shall be displayed prominently.
4. The employees and security staff shall be conversant with installed Fire Fighting equipments of the building and to operate in the event of Fire and Testing.
5. 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 perfectly good working conditions at all times.



7. Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of the building.
8. Close circuit T.V. shall have to be provided for the entire floor area including the basement area of the building.

Each year a certificate is to be obtained from the Director General, West Bengal Fire & Emergency Services certifying about the satisfactory services, performances of all Life and Fire Safety arrangements and installation of the building.

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; Final N.O.C. 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.

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