सत्यमेव जयते

Government of West Bengal

Office of the Divisional Fire Officer

West Bengal Fire & Emergency Services

Purulia Fire Station, Ranchi Road,Purulia, Pin:- 723101

Memo No.: FSR/211862506300013672 **Date : 07-05-2025**

From :
Divisional Fire Officer
Purulia Division
West Bengal Fire & Emergency Services

To :
Suman Sarawgi & Others
Mouza-Dulmi,J.L No.-04,R.S & L.R PLOT No-335(Part)Under sonajuri Gram panchayat ,P.S- TAMNA,TATA ROAD PURULIA

Sub: Fire Safety Recommendation for the occupancy of proposed construction of B+G+4 Storied Commercial cum Residential Apartment Building under group Residential of SumanSarawgi & others, within Tata Road, Mouza: Dulmi, J.L No.-04, R.S. & L.R. Plot No:335(Part)Under sonajuri Gram panchayat , P.S: Tamna, Dist: Purulia, Pin :723101..

This is in reference to your AIN 211862506300013672 dated 25-Apr-2025 regarding Fire Safety Recommendation for the occupancy of proposed construction of B+G+4 Storied Commercial cum Residential Apartment Building under group Residential of SumanSarawgi & others, within Tata Road, Mouza: Dulmi, J.L No.-04, R.S. & L.R. Plot No:335(Part)Under sonajuri Gram panchayat , P.S: Tamna, Dist: Purulia, Pin :723101.

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. Whole Construction of the building shall be carried out as per the approved plan of the local building authority.
2. Materials for rapid flame spread categories including untreated wood fibreboard etc. shall be not used.
3. The doors and windows preferably shall be made of metal.
4. The whole construction of the building shall be carried out as per approved plan drawings conforming to the relevant building rules of the local Municipal Body.
5. The interior finish decoration of the building shall be made with materials with the low flame spread and

low smoke and toxic gas generating categories conforming to I.S. Specification.
6. Arrangements shall have made for sealing all the vertical service ducts with materials of adequate Fire resisting capacity.
7. Fire rating test certificate of all interior finish decoration should be submitted to this office before taking occupancy.
8. Service Ducts and shafts should be enclosed by walls of 2 hours and doors of one-hour fire rating.
9. All such ducts shall be properly sealed, and the fire stopped at all floor levels.

B. OPEN SPACE & APPROACH:
1. The open space surrounding the building shall be kept clear and open to the sky and shall confirm the relevant building rules as well as permit the easy accessibility and manoeuvre ability of the Fire appliances with a turning facility.
2. The approach road and roads surrounding the building shall be sufficiently strong to withstand a load of a Fire Engine weighing up to 45 M.T.
3. The width and height of the entry gates to the premises shall not be less than 5m and 6m respectively.
4. Driveway should be free of any type of obstruction. No parking will be allowed on the Driveway.

C. STAIRCASE:
1. The staircase of the building shall be enclosed type; entire construction shall be made of brick / R.C.C. type having Fire resisting capacity not less than 4 hours respectively marked in the plan.
2. The staircases shall have permanent vents at the top equal to 5% of the cross-sectional area of the staircase's enclosures and openable sashes at each floor level equal to 15% of the said cross-section shall have to be provided in the external wall of the building.
3. All the staircases of the building shall be negotiable to each other on each floor without entering into any room and shall be extended up to the respective terrace.
4. All principal staircases shall not be permitted from the Basement.
5. The roof of the wall shall be 1M above the surrounding roof area.
6. The width of the staircases and corridors and the travel distance of different categories of occupancies shall have to conform to the relevant building rules.
7. Fire and Smoke check doors at the entrances of the Staircase enclosures at each floor level shall be provided AS PER SUITABLE.
8. The F.C.D. shall be at least two-hour Fire resisting wire glass window fitted with a self-closing type openable in the direction of escape.
9. Considering the staircases are the only means of evacuation, emergency lighting arrangement directional, exit, sign, etc. shall be made conforming to the relevant I.S. Code in this regard.

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 the top of the area not less than 0.2m2.
2. The lift of the building shall be designed at high speed "Fire lift" and conspicuously indicated marked in the plan.
3. The electric power shall be from separate supply mains in the building and cables run with the lift shafts, lights, and fans in the lift cars shall be operated from 24 volts, supplied in an emergency in case of failure of normal power supply lift shall automatically trip over alternate supply.
4. Exit doors of the lift lobby shall be through a self-closing smoke stop door of 1-hour fire resistance.
5. Lift car door shall have a fire-resistance rating of half an hour.
6. The words fire lift shall be conspicuously displayed inflorescent paint on the lift landing doors at each floor level.

E. FIRE FIGHTING WATER:
1. Underground water reservoirs having a total water capacity of not less than 50000 ltrs Exclusively for this fighting purpose shall be provided.
2. Overhead reservoirs of not less than 25000 ltrs. Shown/ marked in the plan drawings exclusively for firefighting purpose ball be kept full at all times.
3. The water reservoirs manhole shall have an overflow arrangement with the domestic water reservoirs as well to avoid stagnancy of water.
4. Provision of necessary manhole shall be made on the top of these reservoirs as per specification.
5. Provision of replenishment at the rate of at least 900 ltrs/min. from two separate sources of water supply 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.
7. Provision of placing Fire Appliances near the underground water reservoir to be made to draw water in case of emergency.

F. WATER LAYOUT SYSTEM:

a. Down comer & Hose Reels System:

1. The system shall be so designed that shall be kept charged with water all the time under pressure and capable to discharge 900 ltrs/min. at the ground floor level outlet and minimum 900 ltrs/min. at the topmost and furthest outlet. In both cases the running pressure shall not be less than 3.5 kgs/sq. cm.
2. Provision for Hose Reel units on swivelling drum in conjunction with down comer shall be made near each landing valves.
3. Hose Reel unit with provision of outlets in each floor at the staircase landing/half landing as per suitable at the rate of one such unit of Down Comer and Hose Reel per 1000sq.m. of floor area.
4. Provision of suitable Fire Service inlet shall be made as per relevant I. S. specification.
5. 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).

b. Water projector Protection:

The Electrical installation viz. transformer, HT, LT switch gear etc. shall be protected by high medium velocity water projector system as per suitability.

G. FIRE PUMP:

1. Provision of Fire Pump of 900 LPM Discharge 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 of same capacity shall always be kept on stand-by of diesel driven type.
3. All the pumps shall be incorporated with both manual and auto starting facilities.
4. 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.

a) ELECTRICAL DISTRIBUTION SYSTEM:

1. Electrical distribution system of all the building shall be made in the form of concealed wiring or in heavy gauge M.S. conducted continuously bonded to earth cables shall be I.S. marked and preferably be F.R.L.S. categories.
2. Electrical distribution system shall conform all the requirement laid down in I.S. 1946-1982.
3. For every 23V wiring above false ceiling 660 grade insulated cable shall be used. Transformer switch gear H.T., L.T. and other electrical rooms shall be at the ground floor level and other electric rooms shall be at least 4 hrs. Fire resisting capacity, adequate ventilation arrangement shall have to be made in all the rooms, Dry and explosion proof type shall preferably be installed.
4. All electrical installation viz. Transformers, Switch Gears, L.T., H.T. rooms shall be protected with both auto detection and suppression system as per suitability.

b) Alternative Power Supply:

Arrangement shall be made to supply power with the help of a generator to operate at least the Fire pump, Pump for the deep tube well, Fire Alarm system, etc. and also for illuminating the staircase, corridors etc. and other place of assembly of the building in case of normal power failure.

I. Emergency & Escape Lighting: -

Emergency lighting shall be powered from a source independent of that suppling the normal lighting. Escape lighting shall be capable of: -

1. Indicating clearly and unambiguously the escape routes.
2. Providing adequate illumination along such routes. To allow safe movement of persons towards and through the exits.
3. The emergency lighting system shall be capable of continuous operation for a minimum duration of 1 hour and 30 minutes even for the smallest premises.

J. Electrical Service: -

1. The electric distribution cable/wiring shall be laid in a separate duct. The duct shall be sealed at every floor with non-combustible materials having the same fire resistance as that of the duct. Low & medium voltage wiring running in shaft an in false ceiling shall run in separate conduits.
2. Water mains, telephone lines, intercom lines, gas pipes or any other service line shall not be laid in the duct for electrical cable, use of bus ducts/ solid rising mains instead of cables is preferred.

K. Separate Circuit: -

1. Separate circuits for firefighting pumps, lifts, staircases, corridor lighting & blowers for pressuring system shall be provided directly from the main switch gear panel & this circuits shall be laid in separate conduit pipes, so that fire in one circuit will not affect the others.
2. Such circuits hall be protecting at origin in an automatic circuit breaker.
3. Master switches controlling essentials service circuits shall be cleared labelled.

L. Stand by Electric Generator: -

1. A standby electric generator shall be installed to supply power to staircase & corridor lighting circuit, fire lifts the standby fire pumps, pressurization & damper system in case of failure of normal electric supply.
2. The Generator shall be capable of taking starting current of all the machines & circuits stated above simultaneously.
3. If the standby pump is driven by diesel engine, the generator supply need not be connected to the main electrical pump were parallel HV/LV supply from a separate substation is provided with appropriate transformer for emergency, the provision of generator may be waived in consolation with authority.

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.
3. Disposable Type B.A Musk to be kept always for emergency fire situation.
4. Floor numbers and directional sign, showing the nearest exit, refuge area, and fire points etc. shall have photo luminescent signals at each floor of the building shall be made available conforming I.S. specification.
5. The employees and security staff shall be conversant with installed Fire Fighting equipment of the building and to operate in the event of Fire and Testing.
6. Arrangement shall be made for regular checking, testing and proper maintenance of all the Fire Safety installation and equipment installed in the building to keep them in perfectly good working conditions at all times.
7. A crew of trained Fireman under the experienced Officer shall be maintained round the clock for safety of the building.
8. Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of building.
9. Fire License shall have to be obtained from this Department after compliance of the above Safety Recommendations before commissioning of the Gas Bank.
10. The 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.

On compliance of all the above Fire 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.

Signature valid

Digitally Signed.
Name: Debtanu Basu
Date: 07-May-2025 17:04:15
Reason: D-Sign
Location: E-Dist 2.0

Divisional Fire Officer

West Bengal Fire & Emergency Services