



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

Memo no.:FSR/0125186221100819

Date: 07-02-2023

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

To: Ashish Kumar Saraogi
Unit No. 1509, P. S. Srijan Corporate Park, Tower - 1, 15th Floor, Plot - G2, Block - GP, Salt Lake, Sector - V,
Kolkata - 700 091

Sub: Fire Safety Recommendation for proposed construction of 2(Two) nos. block namely as Tower-1 & Tower-2 (where basement is common) comprised of B+G+VII storied (both) under group Residential Building in favour of Mr. Ashish Kumar Saraogi, of Unit No. 1509, P. S. Srijan Corporate Park, Tower - 1, 15th Floor, Plot - G2, Block - GP, Salt Lake, Sector - V, Kolkata - 700 091, at the project premises no. R.S. & L.R. Dag No.-3653(26 Decimal), 3654(48 Decimal) & 3656(24 Decimal), comprised in L.R. Khatian No.-12236, 12237, 12238, 12239, 12240, 12241, 12242, 12243, 12244, 10758, under Mouza- Gopalpur, J.L. No.- 2, RE SA No.-140, Touzi No.- 125B/1, under P.S. Airport(previously old Rajarhat), under P.O.- Rajarhat Gopalpur, Holding No.- RGM-5/4, and 5/5 Berabari(East), Block-M, under Ward No.- 02(previously 05) Jurisdiction of Bidhannagar Municipal Corporation (previously Rajarhat Gopalpur Municipality) Gopalpur, Ramesh Mitra Sarani(91 Bus Route), North 24 Parganas, West Bengal-700136.

This is in reference to your application no. 0125186221100819 dated 07-12-2022 regarding the Fire Safety Recommendation for proposed construction of 2(Two) nos. block namely as Tower-1 & Tower-2 (where basement is common) comprised of B+G+VII storied (both) under group Residential Building in favour of Mr. Ashish Kumar Saraogi, of Unit No. 1509, P. S. Srijan Corporate Park, Tower - 1, 15th Floor, Plot - G2, Block - GP, Salt Lake, Sector - V, Kolkata - 700 091, at the project premises no. R.S. & L.R. Dag No.-3653(26 Decimal), 3654(48 Decimal) & 3656(24 Decimal), comprised in L.R. Khatian No.-12236, 12237, 12238, 12239, 12240, 12241, 12242, 12243, 12244, 10758, under Mouza- Gopalpur, J.L. No.- 2, RE SA No.-140, Touzi No.- 125B/1, under P.S. Airport(previously old Rajarhat), under P.O.- Rajarhat Gopalpur, Holding No.- RGM-5/4, and 5/5 Berabari(East), Block-M, under Ward No.- 02(previously 05) Jurisdiction of Bidhannagar Municipal Corporation (previously Rajarhat Gopalpur Municipality) Gopalpur, Ramesh Mitra Sarani(91 Bus Route), North 24 Parganas, West Bengal-700136.

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:

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A.CONSTRUCTION :

- 1.The whole construction of the proposed building shall be carried out as per approved plan drawings conforming the relevant building rules of Kolkata Municipal Corporation.
- 2.The interior finish decoration of the building shall be made low flame spread materials conforming relevant I.S. specifications.
- 3.Provision of ventilation at the crown of the Central core-duct of the building shall be provided.
- 4.Arrangements shall have to make for sealing all the vertical & horizontal ducts by the materials of adequate Fire resisting capacity.

B.OPEN SPACE & APPROCH :

- 1.The open spaces surrounding the building shall conform the relevant building rules as well as permit the accessibility and maneuverability of Fire Appliances with turning facility.
- 2.The approach roads shall be sufficiently strong to withstand the load of Fire Engine Weighing up to 45 M.T.
- 3.The width and height of the access gates into the premises shall not less than 5.00 Mt. X 5.00 Mt. of respecting abutting the road.
- 4.All around the driveway should be kept clear for free access.

C. STAIRCASE:

- 1.The staircase of the buildings shall be made of bricks / R.C.C type having Fire resisting capacity not less than 2 hours.
2. The Staircase of the buildings shall have permanent vents at the top and openable sashes at the each floor level in the external wall of the building.
- 3.The width of the staircases shall be made as shown/marked in the plan. Exit doors shall conforming the relevant building rules with up-to-date amendments.
- 4.The staircases shall be extended up to terrace of the buildings and shall be negotiable to each other without entering into any occupied area.
- 5.Fire and smoke doors at the entrance of the staircases 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 with 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 of Block - 1. The word "FIRE LIFT" shall conspicuously written at ground floor.

E. FIRE FIGHTING WATER :

Underground reservoir of 75,000 Lt. for firefighting purpose for the buildings and Overhead reservoir of 5,000 Lt. capacity(for both tower) as marked exclusively for Firefighting purpose with replenishing arrangements @ 1000 Lt/min. preferably from two different sources of water supply shall be provided. The water reservoir shall be kept full at all time and the Fire Water Reservoir shall have overflow arrangement with the domestic water reservoir to avoid stagnancy of water.

F.HYDRANT SYSTEM :

- 1.The building shall be provided with Wet Riser of 100 mm. for internal diameter pipe line with provision of landing valves at the staircase landings/half landings at the rate of one such riser for 1000 Sq/m. of floor area. The system shall be so designed that shall be kept charged with water all the time under pressure and capable to discharge 2280 Lt/min. at the ground floor level outlet and minimum 900 Lt/min. at the top most out let. In both cases the running pressure shall not be less than 3.5 Kg/cm². All other requirements shall conform I.S. 3844-1989.
- 2.Provision for Hose Reel in conjunction with Wet Riser shall be made at each floor level conforming the relevant I.S. specifications.
- 3.Yard Hydrant with provision of adequate numbers Hydrant points along with One number Fire Service inlet(for each tower) shall be installed inside the building premises in accordance with relevant I.S. specification.

G. FIRE PUMP :

1.Provision of the Fire Pump 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 buildings. One such pump shall always be kept on Stand-By & shall have to be installed of Diesel Driven type.

2.Provision of the Jockey Pump shall also have to be made to keep the water based system under pressurized condition at all the time. All the Fire Pumps shall be incorporated with both manual and auto starting facilities. The suction of Fire Pumps shall have to be positive suction type or in case of negative suction the system shall be wet riser cum down comer with suitable terrace pump with overhead tank.

H. SPRINKLER INSTALLATION :

The automatic Sprinkler installation shall be provided in whole Basement area, and Gymnasium, Community Hall, Indoor Games Room of the building as per I.S. specification 9972. Alarm gong to be incorporated along with the Sprinkler System. A testing line of sprinkler shall be made at roof level for routine testing.

I.ALARM, DETECTION AND SUPPRESSION SYSTEM

1.Manually operated Electrical Fire Alarm System of 2 Nos. of break glass type call boxes fitted with Hooters along with Public Address System at each floor connecting with visual panel board. Hooters will be sounded on the same floor and immediate alternate floor. The visual panel board shall be provided at Control Room entrance of ground floor of each block.

2.Auto Fire detection system with the help of Smoke/Heat (as per suitably) Detector shall be installed in all places of below and above false ceiling of the Basement, and Gymnasium, Community Hall, Indoor Games Room of the buildings. The system shall also be made in places of rooms where valuable articles have been kept. The other requirement of the system shall be made in accordance with I.S. 2189-1988.

3.The suppression system shall be made with Fire Extinguisher in D.G. area, Electrical Room and suitable places.

J.ELECTRICAL INSTALLATION & DISTRIBUTION:

1.Electrical distribution system of the building shall be made in the form of concealed wiring or in heavy gauge M.S. conduit, continuously bonded to the earth. Cables shall be I.S. marked and preferably be of F.R.L.S. categories. The electric distribution cables/wiring shall be laid in a separate shaft.

2.Electrical distribution System shall conform all the requirements as laid in I.S. 1646-1982.

3.The vertical & horizontal electrical ducts shall be sealed at each floor level by Fire Resisting materials.

4.The electrical installation shall be adequately protected with CO2/D.C.P. or Medium Velocity projector System (as per suitably).

5.All metallic items like steel structural members etc. shall be bonded properly to the earthing system.

K. AIR CONDITIONING SYSTEM (If any) :

i)The A.H.U. shall be separate for each floor with the system Air Ducts for individual floors and in no way shall interconnect with the duct of any other floor. Within a floor it would be desirable to have separate air handling unit provided for each compartment.

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 the auto detection and alarm system.

iv)The air handling units room shall not be used for storage of any combustible materials.

v)Shafts or ducts, if penetrating multiple floors, shall be of masonry construction with fire damper in connecting ductwork or shall have fire rated duct work with fire dampers at floor crossing. Alternatively, the duct and equipment may be installed in room having walls, doors and fire damper in duct exiting/entering the room of 120 min fire resistance rating. Such shafts and ducts shall have all passive fire control meeting 120 min fire resistance rating requirement to meet the objective of isolation of the floor from spread of fire to upper and lower floors through shaft/duct work.

- vi) The air filters of the air handling units shall be made of non-combustible materials.
- vii) Air ducts serving main floor areas, corridors, etc. shall not pass through the exits/entry passageway enclosure. Exits and lift lobbies etc. shall not be used as return air passage.
- viii) As far as possible, metallic ducts shall be used even for the return air instead of space above the false ceiling.
- ix) The materials used for insulating the duct system (inside or outside) shall be of non-combustible type. Any such insulating material shall not be wrapped or secured by any material of combustible nature.
- x) Inspection panels shall be provided in the ductwork to facilitate the cleaning accumulated dust in ducts and to obtain access for maintenance of fire dampers.

L. FIRE or SMOKE DAMPERS (If any) :

Damper shall be of motorized type/fusible link. Damper shall be so installed to provide complete integrity of the compartment with all passive fire protection sealing. Damper should be accessible to maintain, test and also replace, if so required. Damper shall be integrated with Fire Alarm Panel and shall be sequenced to operate as per requirement and have interlocking arrangement for fire safety of the building. Manual operation facilities for damper operation shall also be provided.

M. Alternate Power Supply:

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

N. FIRST AID FIRE FIGHTING SYSTEM:

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

O. 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. The Department of Fire & Emergency Services, Government of West Bengal, shall not take any responsibility in respect of any legal dispute if pending or arises about the title of land/property.
4. Floor numbers and directional sign of escape route shall be displayed prominently.
5. The occupancy, 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.
6. 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 buildings.

On compliance of all the above Fire and Life Safety Recommendation, 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 test and performance 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 Not Verified
Digitally signed by ABHIJIT
PANDEY
Date: 2023.02.07 13:10:22 IST

Director
West Bengal Fire & Emergency Services

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