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Government of West Bengal
Office of the Director General
West Bengal Fire & Emergency Services
13D, Mirza Ghalib Street, Kolkata – 16

Memo No.: FSR/0125186211000255

Date : 16-12-20

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

To :
BASUNDHARA ESTATE PROJECTS LLP AND OTHERS.
PROJECT,
PROPOSED HORIZONTAL ADDITION
OF B+G+IV STORIED BLOCK WITH
ALREADY CONSTRUCTED B+G+IV
STORIED (HT-19.0 MT.) MERCANTILE
RETAIL BUILDING AT PLOT NO.
MOUZA- BERGRAM, J.L. NO. 207, DAG NO. 987
P.O AND P.S. SANTIPUR, WARD NO-10, DISTRICT-NADIA..
23, BLOCK - SANTIPUR & BEING
PREMISES NO. 555, KABI
JATINDRANATH SENGUPTA SARANI,
P.O. & P.S. SANTIPUR, WITHIN THE
LIMITS OF SANTIPUR MUNICIPALITY,
WARD NO-10, DISTRICT - NADIA.

Sub : Revised Fire Safety Recommendation for Proposed construction of LG+G+III STORIED, under group Mercantile building, In the Name of FUTURE NIRMEN UDYOG, At 555, KABI JATINDRANATH SENGUPTA SARAN

This is in reference to your AIN 211882406300001023 dated 08-Nov-2024 regarding the Revised Fire Safety Recommendation for Proposed construction of LG+G+III STORIED, under group mercantile building, In the Name of FUTURE NIRMEN UDYOG, At 555, KABI JATINDRANATH SENGUPTA SARANI, P.O AND P.S- SANTIPUR, WARD NC 10, DISTRICT-NADIA..

The plan submitted by you was scrutinized and marked as found necessary from Fire Safety point of view. I returning one set of plan with recommendation, this office is issuing Revised Fire Safety Recommendation i favor of the aforesaid building subject to the compliance of th

Recommendation :

CONSTRUCTION:

1. 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.

2. The floor area exceeds 750 m^2 shall be suitable compartmented by separation walls up to ceiling level having at least Two hours Fire resisting capacity.

3. The interior finish decoration of the building shall be made of low flame spread materials conforming to I.S. specifications.

4. Provision of ventilation at the crown of the central core-duct of the building shall be provided.

5. Arrangements shall have to be made for sealing all the vertical & horizontal ducts by the materials of adequate Fire resisting capacity & the doors of service ducts / shafts of 2hr. Fire rating.

OPEN SPACE & APPROACH:

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 road 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 and 5 M respecting

abutting the road.

STAIRCASE:

1. The staircase of the building shall be enclosed type. Entire constructi shall be made of bricks / RCC type having Fire Resisting Capacity not less than 4 hours.

2. The staircase of the building shall have permanent vents at the top ar open able sashes at each floor level in the external wall of the building.

3. The width of the Staircase shall be made as shown in the plan. Corridors and the exit doors shall conform the relevant building rules and well as rules of the cinematograph act. With up-to-date amendments.

4. All the staircases shall be extended up to terrace of the building and shall be negotiable to each other without entering into any room.

5. Fire & Smoke doors at the entrance of all the staircase enclosures as marked in the plan at each floor level shall be provided. The F.C.D. shall b of the least Two-hour Fire resisting Wire Glass Window fitted with self-closing type open able in the direction of escape.

LIFT:

1. The lift of the buildings shall be designed at high speed "Fire Lift" and shall be conspicuously indicated / marked.
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. In case of failure of normal electric supply, it shall automatically trip to alternate supply.

4. Exit doors of the lift lobby shall be through a self- closing smoke stop door of 1 hour fire resistance for Residential Towers.

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.

6. Collapsible gates not permitted.

7. Arrangement shall be provided for extraction of smoke in all the lift shaft by incorporation smoke venting system designed to permit 30 Air changes per hour in case of Fire and shall be of such design as to operate on actuation of Sprinkler or Fire Alarm. In case of failure of normal electric supply, it shall automatically trip to alternate supply.

8. All lifts with lobby shall have to pressurized as per approved drawings.

FIRE FIGHTING WATER:

1.Underground water reservoirs having total water capacity of not less than 100,000 ltrs for shall be provided exclusively for firefighting purpose.

2.Overhead reservoir of not less than 10,000 ltrs. Capacity exclusively for firefighting purpose shall be kept full at all time.

3.The water reservoirs shall have overflow arrangement with the domestic water reservoirs as well as 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 2000 lts./min. from two separate sources of water supply

shall be made.
6.The deep tube wells for the replenishment of the reservoirs shall be incorporated with auto starting facility with actuation of auto detection and suppression arrangement of the premises and shall also be connected witl duel power supply units.
7.Provision of placing Fire Appliances near the underground water reservc to be made to draw water in case of emergency.

WATER LAYOUT SYSTEM:
1. The buildings shall be provided with Wet Riser of 100 mm. internal diameter Pipe Line with provision of landing valves at the Staircase landing / half landings at the rate of one such riser for 1000 Sq.m. of floor area. Th system shall be so designed that shall be kept charged with Water all the time under pressure and capable to discharge 2280 lts/min. at the ground floor level outlet and minimum 900 lts/min. at the top most and furthest outlet. In both cases the running pressure shall not be less than 3.5 Kgs/Sq.cm. All other requirements shall be conforming I.S. 3844 – 1989.
2. Provision for delivery hose in hose box with short branch, Hose Reel units on swiveling drum in conjunction with Wet Riser shall be made nea each floor landing valves.
3. Yard Hydrant / Ring Main Hydrant of 100 mm with provision of adequate numbers of Pillar type Hydrant shall be installed surrounding the buildings accordance with relevant I.S. specifications.
4. Provision of suitable Fire Service Inlet shall be made as per relevant I.S specification.

FIRE PUMP:
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 respective pump room for Residential Towers. One such pump shall always be kept on stand-by of diesel driven type. i.e., hydrant system separately under pressurized condition at all the time. All the pumps shall be incorporated with both manual and auto starting facilities. 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. The Fire Pumps shall be multi stage and multi outlet creating pressure zones.

- Main-2280 LPM
- Jockey for hydrant-180 LPM
- Jocky for Sprinkler- 180 lpm
- Sprinkler Main -2280 LPM
- Stand by (Diesel driven) -2280 LPM

SPRINKLER INSTALLATION:

1. The automatic Sprinkler installation separately of 100mm dia shall be provided in all floor areas of the building as per I.S. 9972. Alarm gong to be incorporated along with the sprinkler system.

LOWER GROUND FLOOR:

1. entire floor shall be adequately ventilated.
2.Entire Floor shall be protected with auto sprinkler system
3. Provision for delivery hose with short branch in a hose box near to the landing valves to be provided.
3.Adiquete numbers of high CFM Exhaust fans shall have to provide for smoke extraction. The system shall be of such design as to operate actuation of heat/smoke sensitive detector on sprinkling. It shall also have an

arrangement to start it manually.
4. Exhaust fans shall have an alternative source of supply.

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 dow in I.S. specification 1946 – 1982.

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

3. The electrical installation shall be adequately protected with automatic CO_2/D.C.P.

4. All electrical installation viz. Transformer Switch Gear L. T., H. T. room 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. anc other places of assembly of the building in case of normal power failure.

Detection and Alarm 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, 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 places of below and preferably above false ceiling 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. Hooter will be sounded in such a manner so that an operation of a Detector or Manual Call Point Hooters will sound on the same floor and immediate alternate floor.

4. Public Address System: -

Public address system linked between all floors and Control Room shall have to be established.

Intelligence Analogue SYSTEM:

1. Auto Fire Alarm System with analogue addressable smoke / Heat detector as per suitability shall be installed in each floor.

2. Both way public address systems shall be made available in all floors of the building. The system shall be connected to the Main Control Room.

3. All the installations shall also be satisfying the I.S. specifications 2189 (as amended) and the code of practice as laid down in the N.B.C. Part-IV.

FIRSTAID FIRE FIGHTING SYSTEM:

First Aid firefighting 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. 2190-92.

AIR CONDITIONING SYSTEM (IF ANY):

1. The A.H.U. shall be separated for each floor with the system Air Ducts for individual floors.

2. Arrangement shall be made for isolation at the strategic locations by incorporating auto dampers in the Air Conditioning system.
3. The system of auto shut down of A.H.U. shall be incorporated with the auto detection and alarm system.
4. The air handling units' room shall not be used for storage of any combustible materials.
5. Escape route like staircase, common corridors, lift lobby etc. shall not be used as return air passage.
6. Wherever the ducts pass through Fire wall of floors, the opening a rounding the ducts shall be sealed with Fire resisting materials such as asbestos rope vermiculite concrete etc.
7. The metallic ducts shall be used even for the return air instead of spac above the false ceiling.
8. The materials used for insulating the duct system (inside or outside) shall be of non-combustible materials glass wool shall not be wrapped or secured by any materials of combustible nature.
9. Area more than 750 sq. m. on individual floor shall be segregated by a Fire wall and automatic fire damper for isolation shall be provided.
10. Air duct services main floor area, corridors etc.

shall not pass through the staircase enclosures.

10. The air handling units shall be separation for each floor, and air ducts for every floor shall be separated and in no way interconnected with the ducting of any other floor.

11. If the air handling units serve more than 1 floor, the recommendation given above shall be complied with in addition to the conditions given below: -

a) Proper arrangements by way of automatic Fire dampers working on fuse able link for isolating all ducting at every floor from the main riser shall be made.

b) When the automatic Fire alarm operates the respective air handling units of the air conditioning system shall automatically switched off.

12. The vertical shaft for treated fresh air shall be of masonry construction.

13. The air filters for air handling units shall be of non-combustible materials.

14. Inspection panel shall be provided in the main trucking to facility the cleaning of ducts of accumulated dust and to obtain access for maintenance of fire dampers.

15. No combustible materials shall be fixed nearer than 15cm to any duct unless such duct properly enclosed and protected with non-combustible materials (glass wool or Spun wool with neoprene facing enclosed and wrapped with aluminum sheeting) at least 3.2m thick. And which would not readily conduct heat.

16. Reverse AHU to be provided in all floor area for smoke extraction purpose and should be integrated with detection system.

General Recommendations:

1. Disposable type B. A. Musk to be kept always for emergency fire situation.

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. Floor numbers and directional sign of escape route shall be displayed prominently.

4. The occupancy and security staff shall be conversant with installed Fire Fighting equipment's 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 equipment's installed in the building to keep them in perfectly good working conditions at all times.

6. A crew of trained Fireman under an experienced officer shall be maintained round the clock for safety of the building.

7. Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of building.

8. Each year a 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 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 favor 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 Not Verified
Digitally Signed
Name: ABHIJIT PANDEY
Date: 16-Dec-2024 15:29:58
Reason: D-Sign
Location: E-Dist 2.0

Director

West Bengal Fire and Emergency Services

Urban Development and Municipal Affairs Department, GoWB

ACKNOWLEDGEMENT RECEIPT

Applicant Name	FUTURE NIRMAN UDYOG AND BASUNDHARA ESTATE PROJECTS LLP PARTNERSHIP
User Id	9903011447
Phone No	9903011447
Municipality Name	SANTIPUR MUNICIPALITY
Mutation Type	Mutation cum amalgamation
Application No	**SNTP/23-24/MU/000290**
Application Date	**27/05/2023**

Payment Successfull against Application No. - SNTP/23-24/MU/000290 Dated: 27/05/2023

Transaction No:	ZHMP1372291931
Date of Payment:	05/09/2023
Amount:	Rs. 139,800.00

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