



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

Memo no.:FSR/0125186221100752

Date: 03-01-2023

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

To: New Age Enclave Private Limited
145, Jessore Road, Kolkata- 700089

Sub: Fire Safety Recommendation for proposed construction of B+G+XXV storied, under group of Residential building (Common Basement), comprising 05 nos of tower (Tower No. – 1,2,3,4 & 5), at premises no- 70, Jessore Road, P.S.- Lake Town, Kolkata – 700089 , Dist. – 24 Pgs. (N).

This is in reference to your application no. 0125186221100752 dated 17-11-2022 regarding the Fire Safety Recommendation for proposed construction of B+G+XXV storied, under group of Residential building (Common Basement), comprising 05 nos of tower (Tower No. – 1,2,3,4 & 5), at premises no- 70, Jessore Road, P.S.- Lake Town, Kolkata – 700089 , Dist. – 24 Pgs. (N).

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:

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 interior finish decoration of the building shall be made low flame spread materials Conforming I.S. specifications.
3. Provision of ventilation at the crown of the central core-duct of the building shall be provide.
4. Arrangements shall have to be made for sealing all the vertical & horizontal ducts by the materials of adequate Fire resistance capacity.

OPEN SPACE & APPROACH :

1. The open space surrounding the building shall conform the relevant building rules as well as Permit the accessibility and maneuverability of Fire appliance with turning facility.
 2. The approach roads shall be sufficiently strong to withstand the load of Fire Engine weighting up to 45 M.T.
 3. The width of the height of the access gates into the premises shall not be less than 5 M. respecting abutting the road.
4. Fire kiosk/control room shall have to be provided main ext/ent of the building
- STAIRCASE :**
1. The staircase of the building shall be enclose type. Entire construction shall be made of Bricks/ R.C.C. type having Fire resistance capacity not less than 4 hours.
 2. The staircase of the building shall have permanent vents at the top & open able sashes at Each floor level in the external wall of the building.
 3. The width of the staircase , Corridors & the exit doors shall Conforming the relevant building rules with up-to-date amendment.
 4. All the staircase shall be extended up to terrace of the building & shall be negotiable to each floor.
 5. Fire & Smoke doors at all the entrances of all the staircase enclosures at each floor level & the entrance of refugee area shall be provided. The F.C.D. shall be of at least two hours Fire resisting wire glass window fitted with self- closing type open able in the direction of escape.
6. Fire shaft/fire tower shall have to be provided as per approved plan drawing as well as maintained NBC Part-4, 2016

LIFT :

1. The walls of the lift enclosures 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. Lift and Lift Lobby communicate to the basement shall have to be pressurized as per guide line of N.B.C. – IV, Annex 'C'

FIRE FIGHTING WATER ;

Underground water reservoir having water capacity of 400000 ltrs. & Over head water reservoir having water capacity 50000 ltrs. exclusively used for Fire fighting purpose with replenishing arrangement @ 1000 Lts./ min. preferably from two different sources of water supply shall be provided. The water reservoir shall have overflow arrangement with the domestic water reservoir as well as to avoid stagnancy of water. The Water reservoir shall be kept full at all time.

HYDRANT SYSTEM :

1. The building shall be provided with Wet Riser of 150 mm. Internal diameter Pipe Line with Provision of landing valves at the staircase landing/half landings at the rate of 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 & capable to discharge 2850 Lts./min. at the ground floor level outlet & minimum 900 Lts./min. at the top most outlet. In both cases the

running pressure shall not be less than 3.5 Kgs/sq.cm. All other requirements shall conforming I.S. 3844-1989.

2. Provision of Hose Reel in conjunction with Wet Riser shall be made at each floor. Conforming the relevant I.S. Specification.
3. Yard Hydrant/Ring Main Hydrant with provision of adequate numbers of Hydrant valve shall be installed surrounding the building in accordance with relevant I.S. Specification.

SPRINKLER INSTALLATION:

1. The automatic Sprinkler installation shall have to be provided at all floors of each tower as per I.S. 9972. Alarm gong to be incorporated along with the sprinkler system.

FIRE PUMP(Multi Stage & Multi Outlet) :

- 1) One No. multistage multi out let motor driven main fire pump capacity 2850 L.P.M. with one No. motor driven of same capacity pump, as well as one No. diesel driven stand by Fire pump of same capacity shall be installed in the Fire Pump Room considering positive suction basis.
- 2) One No. multistage multi out let motor driven Fire pump capacity 2850 L.P.M. shall be Provided for sprinkler system considering positive suction pressure.
- 3) Two Nos. adequate capacity of multi stage jockey pump, one for hydrant system & another for sprinkler system shall be provided inside the Fire Pump Room to keep the system pressurized at all time.
- 4) All motor driven pumps should be connected with LT/HT power & stand by DG backup power with auto change over system through Fire MCC panel.
- 5) One set of pumps shall be provided for each 100 hydrants or part thereof, with a maximum Of two sets alternatively it can be met by providing additional diesel pump of the same capacity and doubling the water, tank capacity as per N.B.C. Part – IV.
- 6) One separate Fire pump to be provided for water curtain system as per N.B.C. Part – IV. 2016

BASEMENT

1. The basement shall be adequately ventilated.
2. The basement shall be protected with Sprinklers system/hose reel system.
3. Mechanical extractor for smoke venting system from basement level shall also be provided. The system shall be of such design as to operate on actuation of heat sensitive detector or sprinkling. It shall also have an arrangement to start it manually.
4. Mechanical extractors shall have an alternative source of supply.
5. Heat sensitive detector shall be provided.
- 6) The area of the basement should be compartmented by using water curtain system As per N.B.C. Part – IV.

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 I.S. specification 1946-1982.
2. The vertical & horizontal electrical ducts shall be sealed at each floor level by fire resisting

material.

3. The electrical installation shall be adequately protected with CO2/D.C.P. Extinguishers.
4. The cable of Transformer shall be paint with Fire retardant paint.
5. Alternative Power System :

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. & other places of assembly of the building in case of normal power failure.

DETECTION , ALARM & SUPPRESSION SYSTEM :

1. Auto fire detection system with the help of Smoke/Heat detector shall be installed in all Places of below and preferably above false ceiling at all floors of each tower .
The system shall be made in places of all rooms , corridors of staircases. The other requirement of the system shall be made in accordance with I.S 2189-1988.
2. Manual call point to be provided at each floor of all staircases of every tower.
3. Hotter will be sounded in such a manner so that an operation of a detector or Manual call Point. Hotter will be sounded on the same floor and immediate alternate floor.
4. Both way public address system shall be made available in all floors of the building. The system shall be connected to the main control room.
5. All the installations shall also be satisfy the I.S. Specification 2189 (as amended) & the code of practice as laid down in the N.B.C Part – IV.
6. The suppression system shall be made with Fire Extinguishers & total flooding system with CO2/F.M-200 particularly in computer room, server room & electrical Processing & data room & in a room of irreplaceable articles.

PUBLIC ADDRESS SYSTEM :

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

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 shall not be used for storage of any combustible materials.

FIRST AID FIRE FIGHTING SYSTEM :

First Aid Fire fighting system arrangement in the style of placing suitable type of portable Fire Extinguishers, in all floors of each towers shall be made in accordance with I.S. 2190- 1992.

GENERAL RECOMMENDATION :

1. Fire Licence shall have to be obtained for storing & processing with L.P.G & 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. Floor numbers and directional sign of escape route shall be displayed prominently.
4. The residents 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 time.
6. A crew of trained Firemen under the 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.

On compliance of all the above Fire & 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 & performance of safety aspects of installation of the building.

N.B. : Any deviation & changes the nature 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.

Director
West Bengal Fire & Emergency Services

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