



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

Memo no.:FSR/0125186230200573

Date: 29-09-2023

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

To: TIRUPATI CONSTRUCTION
Holding No-961/7,M.G.Rd.,R.S.Dag No- 125,126,132,133,149,L.R.Dag No-230,231,238,239,250,L.R.KH.No-12318,12559,J.L.No-20, Ward No-22, P.S.And Mouza- Chinsurah, Under Chinsurah Municipality,Dist.-Hooghly-712101

Sub: Fire Safety Recommendation for the Proposed Construction of G+7 storied Residential Building in Block-A and in Block-B at M.G.Road, R.S. DAG NOS,-125, 126, 132, 133, 149; L.R. DAG NOS,-230, 231, 238, 239, 250; L.R. KHATIAN nos.-12318, 12559; of PS+Mouza-Chinsurah, J.L. No.-20 , Ward No.-22. Under Hooghly-Chinsurah Municipality, Holding No.-961/7, Dist-Hooghly, Pin-712101 W.B., India.

This is in reference to your application no. 0125186230200573 dated 16-08-2023 regarding the Fire Safety Recommendation for the Proposed Construction of G+7 storied Residential Building in Block-A and in Block-B at M.G.Road, R.S. DAG NOS,-125, 126, 132, 133, 149; L.R. DAG NOS,-230, 231, 238, 239, 250; L.R. KHATIAN nos.-12318, 12559; of PS+Mouza-Chinsurah, J.L. No.-20 , Ward No.-22. Under Hooghly-Chinsurah Municipality, Holding No.-961/7, Dist-Hooghly, Pin-712101 W.B., India.

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:

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 local Municipality Body and shall remain same as per approved plan of this department.
- 2.Any deviation with regard to the construction shall be verified by the concerned building sanctioning authority.
- 3.Material for rapid flame spread categories including untreated wood fibred board etc. shall not be used. The doors and windows preferably shall be made of metal.
- 4.Provision of ventilation at the crown of the central core-duct of the building shall be provided.
- 5.Arrangement shall have to be made for sealing all the vertical and horizontal ducts by the materials of adequate fire

resisting capacity.

6.All the new construction that to be done for the fulfillment of the fire safety recommendation should be tested for fire rating test and the test certificate should be submitted to the office.

B. OPEN SPACE AND APPROACH:

1.The open spaces 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 manoeuvrability of the Fire Appliance with turning facility.

2.All the internal road should be made as per Plan approved by the department and should be so strong so that it can withstand the load of the fire vehicle weighting 45 M.T.

3.All the internal road should be made as per Plan approved by the department or shall not be less than 06 MTR. & near refuge platform 09 MTR. The entire internal road should be so strong so that it can withstand the load of the fire vehicle.

4. CONDITION-- DRIVE WAY ALL AROUND THE BUILDING SHALL NOT BE LESS THAN MINIMUM 5 (FIVE) METER.

C. STAIRCASE:

1.The staircase of the building shall be enclosed type. Entire construction shall be made of 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 equal to 5% of the cross sectional area of the staircases enclosures and open able sashes at each floor equal to 15% of the said cross section are shall have to be provided in the external walls of the building.

3.The position of the staircase shall be made as shown in the plan. Width of the staircases, Corridors and the exit doors shall conform the relevant Building Rules with up-to-date amendments.

4.The entire staircase shall be extended up to terrace of the building and shall be negotiable to each floor and also to other staircase.

5.Considering the staircases are only means of evacuation, emergency lighting arrangement directional exit sign etc. shall be made conforming the relevant I. S. Code in this regards.

6.Fire and smoke doors at the entrances of all the staircase enclosures as shown 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 open able in the direction of escape or at the entrance to lift lobby and stair well conforming the relevant I. S. Code in this regards.

D. PRESSURIZATION OF STAIRCASES AND LIFT LOBBIES:--

1.All the stair cases at each floor of both Tower of the building shall be mechanically ventilated following the provision of Table 6, NBC, Part IV, 2016 and relevant I.S. Specification.

2.Lift Lobby with Fire Door (120 min) at all level shall be pressurized with positive pressurization of 25 to 30 Pa. and a possible pressure of 50 Pa shall be maintained in the lift shaft. round the clock as per guide line of N.B.C., Part-IV, 2016. The mechanism for the pressurization shall act automatically with the fire alarm.

E. LIFT:

1.The walls of the lift enclosure of the building shall be at least two hours Fire Resisting type. Collapsible gate shall not be permitted.

2.In case of failure of normal electric supply, it shall automatically trip over to alternate supply. The lift shall be so wired that

in case of power failure, it comes down at the ground level landing to stand still with door open.

3. Arrangement shall be provided for extraction of smoke from the lift shaft by incorporation smoke venting system 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.

4. 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.

5. At least one no. passenger lift of the building shall be designated as high speed "Fire Lift" and conspicuously indicated at ground floor "FIRE LIFT". The speed of the fire lift in the building shall be such that it can reach the top from the ground floor within 1 minute in visual indications of floor numbers shall incorporated in the lift cars.

6. Grounding switch (es), at ground floor level shall be provided to enable the fire service to ground the lifts.

7. Telephone/Talk back communication facilities may be provided in lift cars for communication system and lifts shall be connected to the fire control room of the building.

8. Suitable arrangements such as providing slope in the floor of the lift lobby shall be made to prevent water used during fire-fighting, etc at any landing from entering the lift shafts.

9. A sign shall be posted and maintained on every floor at or near the lift indicating that in case of fire, occupants shall use the stairs unless instructed otherwise. The sign shall also contain a plan for each floor showing the location of the stairways. Floor marking shall be done at each floor on the wall in front of the lift-landing door.

10. 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.

F. FIRE REFUSE AREA:-

1. For placing of Fire Service High Rise Ladder necessary clearance and turning facility shall be maintained Subject to space of 9 meter X 15 meter must be kept free for aerial ladder in the driveway/Ground Floor.

G. ELECTRICAL INSTALLATION AND DISTRIBUTION:-

1. The electrical installation including Transformers (if any), Switch Gear, 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. For every 230V 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. The 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 transformer shall be installed.

3. The electrical installation shall be adequately protected with CO2/D.C.P. or Medium Velocity / Projection System Fire Extinguishers conforming I.S. specification.

4. All electrical installation viz. Transformers (if any), Switch Gear, H.T rooms shall be protected with both auto detection and suppression system as per suitability.

5. 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 preferable be of F.R.L.S. categories. M.C.B. shall be installed in electrical circuit to avoid electrical fire hazards.

6. All electrical cable should run through cable tray only and fire resisting coating should be done to avoid spread of fire.

7. Lightning arrester should be made to avoid natural Hazard.

8. Switch, wire should be of I.S. Approved.

9. Alternative Power Supply :Arrangement for alternative power supply shall have to be made to supply power with the help of a generator to operate at least the Fire Pump, Deep Tube-Well Pump, Fire Alarm System, Fire Lift, Sprinklers, Detection

system etc. and also for illuminating the Staircase, Corridors, Lobbies etc. and other places of assembly of the building in case of normal power failure.

10. Generator room will be protected with two numbers of 22.5 Ltrs. Trolley mounted A.F.F.F. extinguisher.

H. FIRE FIGHTING WATER:-

1. The Underground water reservoir having water capacity of 72,000 Ltrs. (Shown in the plan) exclusively for fire fighting purpose shall be provided.
2. Provision of replenishing arrangements at least @1000 Ltrs./Mins. preferably from two different sources of water supply shall be provided.
3. Provision of Fire Service inlet shall be installed on the entrance of the building.

I. WATER LAYOUT SYSTEM:

1. The building shall be provided with Wet Riser and Hose Reel unit of 150 mm internal diameter pipe line with provision of landing valves in each floor at the staircase half landing (both RCC staircase of Block-B Building) shall have to be made in all the areas of the building satisfy the code of IS.-3844-1989.
2. The system shall be so designed that shall be kept charged with water all the time under pressure and capable to discharge minimum 2280 Lts/min at the top most outlet and the running pressure shall not be less than 3.5 Kgs/cm². at any point. All other requirements shall conform I.S. 3844-1989.
3. All covered floors area of Parking, Club & Community Hall area of the Building shall be suitable protected by automatic Sprinkler installation with flow control switch having integrity with the fire alarm panel conforming the grade as per I.S. Specification 9972.

J. FIRE PUMP :

1. The provision of Fire Pump shall have to be made to supply water should not be less than 2280 LTRS./MIN. and pressure at the top and furthestmost hydrant not less than 3.5 KGS./SQ. CM². discharged into water based system, which shall be installed in the building.
2. A Stand by Pump of equal capacity shall be provided on alternative source of supply preferable be of diesel driven type.
3. Provision of jockey pump shall also have to be made to keep up the water based system under pressurized condition at all the time. The running pressure shall not be less than 3.5 Kgs/Sq.cm². All the pumps shall be incorporated with both manual and auto starting facility with alternate power supply.

K. MANUAL 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, talk back system at each floor connecting with audio-visual panel board shall be made in Control Room in accordance with I.S. 2189-1988.
2. Hooter will be sounded in such a manner so that an operation of Smoke/Heat Detector as per suitability (in all common area such as community hall, lobby, corridor, etc or Manual Call Point. Hooters will Sound on the same floor and immediate alternate floor.
3. All the installations shall also be satisfy the I.S. specifications 2189 (as amended) and the code of practice as laid down in the N. B. C. Part-IV.

L. FIRST AID FIRE FIGHTING SYSTEM:-

1.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.Natural ventilation for entire car parking and each room of each Flats of each Tower shall have to be provided by projecting window.

2.Floor numbers and directional sign, showing the nearest exit area, Fire Points etc. shall have photo luminescent signals at each floor of all blocks of building including shall be made available conforming the relevant I.S. Specification.

3.The occupants, employees and security staffs shall be conversant with installed Fire Fighting Equipment's of the building and to operate in the event of Fire and Testing.

4.Arrangement shall be made for regular checking, testing and proper maintenance of all the Fire Safety installation and equipment's and means of escapes installed in the building to keep them in perfectly good working conditions at all times.

5.A crew of trained Fireman shall be maintained round the clock for the safety of the building.

6.The Department of Fire and 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.

On compliance of all the above Life and Fire Safety Recommendation, the Director General, West Bengal Fire & Emergency Services shall be approached for necessary inspection and testing of all 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.

DIRECTOR
West Bengal Fire & Emergency Services