

(1)

Government of West Bengal
Office of the Divisional Fire Officer
North 24 Parganas Division
West Bengal Fire & Emergency Services

Memo No. : FS/N 24 PGS DIVN./162/16 (57/16)

Dated: 16/8/16

From : The Divisional Fire Officer,
North 24 Parganas Division,
West Bengal Fire & Emergency Services.

To : Mr. Arun Kumar Sancheti, Constituted Attorney,
'LORD REAL ESTATE PVT. LTD. & OTHERS',
12C, Chakraberia Road (N),
Kolkata-700020.

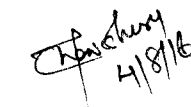
Sub : Fire safety recommendation of a proposed construction of a (B+G+XVIII) storied Residential Building (comprising Block-1, 2 & 3) at R.S./L.R. Dag No.- 243, 246, 252, 348, 348/1066, 349, 350, 356, L.R. Khatian No.-805, 2347 to 2351, 2631 to 2649, 2652, 2363 to 2367, 2370, 2382, 2383, 2391, 2434 to 2437, 2441 to 2444, 3101, 3104 in Mouza- Chakpachuria, J.L. No.-33, Touzi No.-10, under Patharghata Gram Panchayet, P.S.- New Town, Dist- North 24 Parganas.

This is in reference to your letter dated: 16-03-2016, received on 18-03-2016 regarding Fire safety recommendation of a proposed construction of a (B+G+XVIII) storied Residential Building (comprising Block-1, 2 & 3) at R.S./L.R. Dag No.- 243, 246, 252, 348, 348/1066, 349, 350, 356, L.R. Khatian No.-805, 2347 to 2351, 2631 to 2649, 2652, 2363 to 2367, 2370, 2382, 2383, 2391, 2434 to 2437, 2441 to 2444, 3101, 3104 in Mouza- Chakpachuria, J.L. No.-33, Touzi No.-10, under Patharghata Gram Panchayet, P.S.- New Town, Dist- North 24 Parganas.

The plan drawings 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 favour of the aforesaid building subject to the compliance of the following fire safety measure.

Encl. :

1. Recommendations.
2. One set Plan.


4/8/16
Divisional Fire Officer
North 24 Parganas Division
West Bengal Fire & Emergency Services

RECOMMENDATIONS

A. CONSTRUCTION :

- 1) The whole construction of the existing building shall be carried out as per approved plan drawings conforming the relevant building rules of West Bengal Municipal Building Rules.
- 2) The interior finish decoration of the building shall be made low flame spread materials conforming I.S. specification.
- 3) Provision of ventilation at the crown of the central core duct of the building shall be provided.
- 4) Arrangements shall have to be made for sealing all the vertical ducts by the materials of adequate fire resisting capacity.

B. 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 and height of the access gates into the premises shall not be less than 5 meter and 5 meter respecting abutting the road.

C. STAIRCASE :

- 1) The staircase of the building shall be enclosed type. Entire construction shall be made of bricks / 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 and openable sashes at each floor level in the external wall of the building.
- 3) The width of the staircases shall be made as marked in the plan, corridors and the exit doors shall conforming the relevant building rules with upto date amendments.
- 4) All the staircase shall be extended up to terrace of the building and shall be negotiable to each other without entering into any room.
- 5) Fire and smoke doors at the entrances of all the staircases enclosure 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 wire glass window fitted with self-closing type openable in the direction of escape.

D. LIFT (IF ANY) :

- 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. The word "FIRE LIFT" shall conspicuously displayed in fluorescent paint on the lift landing doors at each floor level.

E. REFUGE AREA :

- 1) Refuse area shall not be less than 15 sq meters, shall be provided on the external wall with cantilever projection or other suitable means at 24 M level of the building as shown in the drawing.
- 2) The refuge area shall be of fire resisting construction and protected with self closing FCD at the entrance from the staircase lobbies.
- 3) The position of refuge areas shall be such that they are negotiable by the fire service ladder from the ground.
- 4) 9 mtrs. x 15 mtrs. clean open space shall be provided below each Refuge area for placing & operational use of Arial Ladder.

F. BASEMENT :

- 1) The basement shall be adequately ventilated.
- 2) Basement shall not be used for other purpose except car parking otherwise it should be kept closed completely.
- 3) The basement shall be protected Auto Sprinkler System, Hydrant System and Hose Reel System as per requirement.
- 4) Additional staircase from the open air as shown in the drawing shall be constructed beside the ramps conforming relevant I.S. specification.

- 5) Mechanical extractor for smoke venting system from lower/upper basement levels shall also be provided. The system shall be of such design as to operate on actuation of heat/smoke sensitive detector or sprinkling. It shall also have an arrangement to start it manually.
- 6) Mechanical extractors shall have an alternative source of supply.

G. FIRE FIGHTING WATER :

Under ground water reservoir water capacity at 1,50,000 ltrs and overhead reservoir of 20,000 ltrs exclusively for fire fighting purpose with replenishing arrangements @ 1,000 ltrs/min preferably from two different sources of water supply shall be provided. The Fire 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.

H. 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 landings / half landings at the rate of one such riser for 1000 sq m of floor area. The overhead Reservoir shall be connected with the adequate diameter pipe with wet risers of hydrant. The system shall be so designed that shall be kept charged with water all the time under pressure and capable to discharge 2850 lts/min at the ground floor level outlet and minimum 900 ltrs/min at the top most outlet. In both cases the running pressure shall not be less than 7.0 kgs/sq.cm. at the ground floor level & 3.5 kgs/sq.cm. at the top-most level. 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. specification.
- 3) Yard Hydrant / Ring Main Hydrant with provision of adequate numbers Hydrant shall be installed surrounding the building in accordance with relevant I.S. specification.
- 4) Provision of three way collecting head for uses of Fire services shall be provided at the entrance of the building.

I. SPRINKLER INSTALLATION :

The automatic sprinkler installation shall be provided in basement and in all floor areas of the building as per I.S. 15105:2002. Alarm gang to be incorporated along with the sprinkler system.

J. 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 building. One such pump shall always be kept on stand-by preferably be of diesel driven type.

Provision of jockey pump shall also have to be made to keep the water based system 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 of positive type.

K. 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. 1946-1982.
- 2) The electrical distribution cables/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 and medium voltage wiring running in shaft and in false ceiling shall run in separate conduits.
- 3) The electrical installation shall be adequately protected with CO₂/D.C.P. extinguishers.
- 4) Alternative power supply - arrangements shall have to made to supply with the help of a generator to operate at least the Fire Pump, Pump for deep tube well, Fire Alarm System, Fire Lift etc. and also for illuminating the staircase, corridors etc. and other places of assembly of the building incase of normal power failure.

L. DETECTION, ALARM AND SUPPRESSION SYSTEM :

- 1) Manually operated electrical fire alarm system of break glass type call boxes fitted with hooters along with public address system, talk back system at each stair lobby of 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 Amenities and Facilities hall & corridor 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) The suppression system shall be made with Fire Extinguishers particularly in computer and Electrical processing and data room and in a room of irreplaceable articles.
- 4) Hooter will be sounded in such a manner so that an operation of a Detector or Manual Call Point Hooters will be sounded on the same floor and immediate alternate floor.
- 5) **Public Address System:** This system linked between all floors and Control Room shall have to be established.

M. AIR CONDITIONING SYSTEM (IF ANY) :

- 1) The A.H.U shall be separated for each floor with the system Air Ducts for individual floor.
- 2) Arrangement shall be made for isolation at the strategies location by incorporating auto damper 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 unit's room shall not be used for storage of any combustible materials.

N. FIRST AID FIRE FIGHTING SYSTEM :

First Aid Fire fighting arrangement like Fire Extinguishers, Fire buckets etc. will be provided in all floors of the building. One (1) no. of water expelling extinguisher having capacity 9 ltrs. or ABC type having capacity 5 kg/ 6 kg fire extinguisher, for every 200 m² of floor area or part thereof with minimum of two (2) nos. extinguishers per compartment or floor of the building shall be installed. The extinguishers shall be so located as to be available within 15 mtr. radius conforming I.S. 2190-2010.

O. GENERAL RECOMMENDATIONS :

- 1) Fire License shall have to be obtained from the License section of the Department for proposed storing of highly combustible articles and processing with L.P.G, which come under the pervue of License Section.
- 2) Fire Notice for firefighting and evacuation from the building shall be prepared and be displayed at a vulnerable places of the building.
- 3) Floor numbers and directional sign of escape routs shall be displayed prominently.
- 4) The occupants, Fire Personnel and security staff shall be conversant with installed fire fighting equipments of the building for operation in the event of Fire & Testing.
- 5) Arrangement shall be made 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.
- 6) A crew of trained fireman under the 'Professionally Qualified Fire Personnel' 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 the building.
- 8) Each year a certificate is to be obtained from the **Divisional Fire Officer, North 24 Parganas Division, West Bengal Fire & Emergency Services** certifying about the satisfactory services, performance of all the life & fire safety arrangements and installation of the building.

This shall be treated as **Fire Safety Recommendation** on compliance of all the above fire and life safety recommendations, the **Divisional Fire Officer, North 24 Parganas Division, 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 recommendations will be treated as cancelled.

Chowdhury
4/8/16

**Divisional Fire Officer
North 24 Parganas Division
West Bengal Fire & Emergency Services**