



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

Memo no.:FSR/0125186228700210

Date: 09-05-2022

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

To: Swastic Projects Pvt. Ltd. C.A. of Sree Sree Iswar Daya Nidhi
87 BALLYGUNGE PLACE, WARD 68, BOROUGH-VIII, P.S-GARIAHAT, KOLKATA-700019

Sub: Fire Safety Recommendation in favour of Proposed G+XII Storied Under Group Residential Building U/S- 394 of K.M.C. Act. 1980 and complying KMC Building Rule 2009 keeping the Existing G+1 Storied building Retained situated at premises No- 87, Ballygunge Place, Kolkata- 700019, Ward – 68, Borough –VIII, P.S.- Gariahat.

This is in reference to your application no. 0125186228700210 dated 07-03-2022 regarding the Fire Safety Recommendation in favour of Proposed G+XII Storied Under Group Residential Building U/S- 394 of K.M.C. Act. 1980 and complying KMC Building Rule 2009 keeping the Existing G+1 Storied building Retained situated at premises No- 87, Ballygunge Place, Kolkata- 700019, Ward – 68, Borough –VIII, P.S.- Gariahat.

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:

- The whole construction of the proposed building as well as existing building shall be carried out as per approved plan drawings conforming the relevant building rules of local Municipal Body.
- The floor area exceeds 750 m² shall be suitable compartmented by separation walls up to ceiling level having at least Two hours Fire resisting capacity.
- The interior finish decoration of the building shall be made of low flame spread materials conforming to I.S. specifications.
- Provision of ventilation at the crown of the central core-duct of the building shall be provided.
- 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.

(B) OPEN SPACE & APPROACH:

- 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.
- The approach road shall be sufficiently strong to withstand the load of Fire Engine weighting up to 45 M.T.
- 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.

(C) STAIRCASE:

- The staircase of the building shall be enclosed type. Entire construction shall be made of bricks / RCC type having Fire Resisting Capacity not less than 4 hours.
- The staircase of the building shall have permanent vents at the top and open able sashes at each floor level in the external wall of the building.
- The width of the Staircase shall be made as shown in the plan. Corridors and the exit doors shall conforming the relevant building rules and well as rules of the cinematograph act. with up to date amendments.
- All the staircases shall be extended up to terrace of the building and shall be negotiable to each other without entering into any room.

(D) LIFT :--

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

(E) Refuge Area :

- Refuge Area shall not be less than 15 Sq M on the external wall with cantilever projection at the designated height as per NBC Part-IV 2016
- The refuge area shall be of Fire Resisting Construction and protected with Self Closing FCD at the entrance from the Staircase shaft.
- The projected refuge area shall be surrounded by 1 M high wall and opening to the refuge area from utility or any utility shall not be allowed.

(F) FIRE FIGHTING WATER :

- Underground water reservoir having water capacity of 100000 Ltrs. and O.H.W.R. 10000 ltrs capacity exclusively for firefighting purpose shall be kept full at all time.

- The Fire water reservoir shall have overflow arrangement with the domestic water reservoir as well as to avoid stagnancy of water.
- Provision of necessary manhole shall be made on the top of this reservoir as per specification.
- Provision of replenishment at the rate of at least 1000 lts./min. from two separate source of water supplies shall be made.
- The deep tube wells for the replenishment of the reservoir shall be incorporated with auto starting facility with actuation of auto detection and suppression arrangement of the premises and shall also be connected with dual power supply units.
- Provision of placing Fire Appliances on the underground water reservoir to be made to draw water in case of emergency.

(G)WATER LAYOUT SYSTEM:

- The building shall be provided with wet riser with 150mm. internal diameter Pipe Line with provision of Hose Reel Hose at the Staircase landings / half landings. The system shall be so designed that shall be kept charged with Water all the time under pressure All other requirements shall conforming I.S. 3844 – 1989.
- Provision for Hose Reel units on swiveling drum in conjunction with Wet Riser cum Down Comer shall be made near each landing valves.
- Ring Main Hydrant with provision of adequate numbers Hydrant shall be installed surrounding the building in accordance with relevant I.S. specifications.
- Two fire service inlet near the entry or exit of the premises facing to the abutting road shall have to be provided.
- All the parking area , lobbies of all floors shall have to be provided with Auto-sprinklers and Auto Detection system

(H)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 be of diesel driven type.
- Provision of Jockey Pump/Stand by 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 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 Discharge Capacity of Jockey shall have to be 180LPM considering other IS specification.
- The Discharge Capacity of Main shall have to be 2280LPM considering other IS specification.
- The Discharge Capacity of Stand by shall have to be 2280LPM considering other IS specification.

(I)Public Address System:

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

(J) ELECTRICAL INSTALLATION & DISTRIBUTION:

- 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.
- The vertical ducts shall be supply sealed at alternative floor level.
- The electrical installation shall be adequately protected with CO2/D.C.P. or Medium Velocity / Projector system.
- 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, Fire Lift etc and also for illuminating the staircase, corridors etc and other places of assembly of the building in case of normal power failure.

(K) AIR CONDITIONING SYSTEM: (If any)

- The A.H.U. shall be separated for each floor with the system Air Ducts for individual floors.
- Arrangement shall be made for isolation at the strategic locations by incorporating auto dampers in the Air Conditioning system.
- The system of auto shut down of A.H.U. shall be incorporated with auto detection and alarm system.
- The air handling Units room shall not be used for storage of any combustible materials.
- The A.H.U. shall be separated for each floor with the system .Air ducts for individual floors.
- Arrangement shall be made for isolation at the strategic locations by incorporating auto dampers in the air conditioning system.
- The system of Auto shut down of A.H.U. shall be incorporate with the auto detection and alarm system.
- Escape route like staircase, common corridors lift lobby etc. shall not be used as return air passage.
- The A.H.U. room shall not be used for storage of any combustible materials.
- Arrangements shall be made for isolation at the strategic location by incorporating auto dampers in the Air Conditioning System.
- Wherever the ducts pass through Fire Wall of Floors, the opening around the ducts shall be sealed with fire resisting materials such as asbestos etc.
- The metallic ducts shall be used even for the return air instead of space above the false ceiling.
- The material 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 . If the air handling unit serve more than one floor, the recommendation given above shall be complied with in addition as below:---
- (a) proper arrangement by way of automatic fire dampers working on fusible link for isolating all ducts at every floor from main riser shall be made.
- (b) The vertical shafts for treated fresh air shall be of masonry construction.
- (c) The air filter for A.H.U. shall be of non-combustible materials.
- (d) The A.H.U. room shall not be used for storing any combustible material.

(e). Inspection panel shall be provided in the main trunk to facilitate the cleaning of ducts of accumulated dust and to obtain access for maintenance of fire dampers.

(L) FIRST AID FIRE FIGHTING SYSTEM:

•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:

•Fire License shall have to be obtained for proposed storing and processing with L.P.G. and other highly combustible articles.

•Fire Notice for Fire fighting and evacuation from the building shall be prepared and be displayed at all vulnerable places of the building.

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

•The 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.

•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.

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 installations 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, F. S. C. 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.

Signature valid

Digitally signed by ABHIJIT
PANDEY
Date: 2022.05.09 14:00:25 IST

Director
West Bengal Fire & Emergency Services