

GOVERNMENT OF WEST BENGAL
OFFICE OF THE DIRECTOR GENERAL
WEST BENGAL FIRE & EMERGENCY SERVICES
13-D, Mirza Ghalib Street, Kolkata - 700 016.

Memo. No. : WB FES / 9961 /17/ 24Pgs/RB/369/17(369/17)

Date: 15/11/17

From: Divisional Fire Officer
Fire Prevention Wing
West Bengal Fire & Emergency Services.

To: The Director,
Ganapati Niwas Pvt. Ltd.
11, Crooked Lane,
Kolkata - 700069..




Sub: Fire Safety Recommendation in favour of Proposed G+ VII storied under group Residential building at the premises Mohan Ghosh Road, Bagher Ghol, Garia, P. S. - Sonarpur, Dist. - South 24 Parganas

This is in reference to his letter No. Nil, dated. 02/03/2017, regarding Fire Safety Measure for Proposed G+ VII storied under group Residential building at the premises no. - L. R. Dag No. - 1497,1508,1509,1510,1511,1512,1517,1518,1519,1520,1521,1522,1539,1540,1541,1542, 1543, 1544, 1548, 1549, 1550 of Mouza - Ramchandrapur, 1. L. No. - 58, L. R. Khatian No. - 2222 and L. R. Dag No. - 2555, 2556, 2557, 2558, 2564(P), 2565, 2566, 2567 of Mouza - Bonhooghly, 1. L. No. - 65, L. R. Khatian o. - 6665, Mohan Ghosh Road, Bagher Ghol, Garia, P. S. - Sonarpur, Dist. - South 24 Parganas.

The plan drawing submitted by you was scrutinised 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 Recommendations** in favour of the aforesaid building subject to the compliance of the following fire safety measure.

Enclose:

1. One set of plan.
2. Recommendation.


13/11/17
Divisional Fire Officer
Fire Prevention Wing
West Bengal Fire & Emergency Services

RECOMMENDATION

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 local Municipal Body.
2. The interior finish decoration of the building shall be made low flame spread materials conforming L.S. specifications.
3. Provision of ventilation at the crown of the central core-duct of the building shall be provided.
4. Arrangements shall have to make for sealing all the vertical ducts by the materials of adequate Fire resisting capacity.
5. Any short of projection in the 1st floor level shall not be allowed.

B. OPEN SPACE & APPROCH:

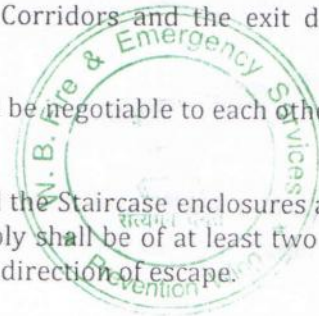
1. The open space surrounding the building shall be conform the relevant building rules as well as permit the accessibility and maneuverability of Fire appliance with turning facility.
2. The approach roads shall be sufficiently strong to withstand the load of Fire Engine weighting upto 45 M.T.
3. The width and height of the access gates into the premises shall not be less than 5M X 5 M in respect of the abutting 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.
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 Door Assembly including Fire Exit Hardware at the entrances of all the Staircase enclosures as marked in the plan at each floor level shall be provided. The Fire Door Assembly shall be of at least two hour Fire resisting wire glass window fitted with self-closing type openable in the direction of escape.

D. Lift:

1. The walls of the lift enclosure shall be at least two hours fire resisting type
2. Collapsible gate shall not be permitted.
3. Lift shall not be used as means of escape during emergency.
4. Lift Car Door shall be at least One hour Fire Rating.



2

E. FIRE FIGHTING WATER:

Underground water reservoir having water capacity of 2,00,000 ltrs. and O.H. W.R., capacity 20,000 ltrs. exclusively for Firefighting purpose with replenishing arrangements @ 1000 ltrs./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.

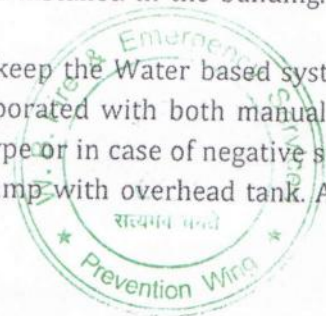
F. HYDRANT SYSTEM:

1. The building shall be provided with Wet Riser at 150mm. 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 system shall be so designed that shall be kept charged with Water all the time under pressure and capable to discharge 2280 ltrs/min. at the ground floor level outlet and minimum 900lts/min. at the top most outlet. In both cases the running pressure shall not be less than 3.5Kgs/Sq.cm. All other requirements shall conforming 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. Specifications.
3. Yard Hydrant / Ring Main Hydrant with provision of adequate numbers Hydrant shall be installed surrounding the building in accordance with relevant I.S. specifications.
4. **Automatic Sprinkler System**

Automatic Sprinkler System shall be provided in entire shop areas and areas of public assembly, If any.

G. FIRE PUMP:

1. Provision of the Fire Pump (2280 lpm) 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 diesel driven** type.
2. Provision of Jockey Pump (180 lpm) 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. A separate pump for the sprinkler installation, shall preferably be provided.



H. 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/Fire barrier of at least two hours fire rating.
3. The electrical installation shall be adequately protected with CO₂/D.C.P. or Medium Velocity /Projector System.
4. For emergency illumination system separate wiring in separate conduit. Electrical ducts shall not be allowed in staircase.
5. **Alternate 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. and other places of assembly of the building in case of normal power failure.

2

DETECTION AND ALARM SYSTEM:

1. Manually operated Electrical Fire Alarm system with at least one numbers of break glass typecall boxes fitted with Hooters along with public address system, at each floor connecting with 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: - Both way

Public address system linked between all floors and Control Room shall have to be established. The Public address system shall have to be provided with alternative power supply which will operate automatically in case power failure.

J. Protection Measures during Building Construction

The high rise building during construction shall be provided with the following fire protection measures, which shall be maintained in good working condition at all the times: .

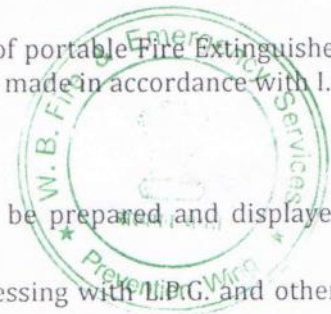
1. Dry riser of minimum 100 mm diameter pipe with hydrant outlets on the floors constructed with a fire service inlet to boost the water in the dry riser and maintenance should be in accordance with good practice.
2. Drums of 2000 litre capacity filled with water with two fire buckets on each floor;
3. A water storage tank of minimum 20 000 liters capacity, which may be used for other construction purposes also.

K. 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.

L. GENERALRECOMMENDATIONS:

1. Fire Notice for Fire Fighting and evacuation from the building shall be prepared and displayed at all vulnerable places of the building.
2. Fire License shall have to be obtained for proposed storing and processing with L.P.C. and other highly combustible articles.
3. Floor numbers and directional sign of escape route shall be displayed prominently.
4. 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.
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 times.
6. A crew of trained Fireman under an experienced Officer have to be maintained round the clock for safety of the building.



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The Fire Safety audit to be conducted at regular interval and to be recorded in the Fire Prevention maintenance register.

8. Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of building.
9. 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 & 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 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.



(Handwritten signature)
13/11/17

**Divisional Fire Officer
Fire Prevention Wing
West Bengal Fire & Emergency Services**