

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

Memo No : IND/WB/FES/20172018/4944

DATE: 11/04/2018

From :

**The Director
Fire Prevention Wing,
West Bengal Fire & Emergency Services.**

To :

**Ratan Mondal
thakdari,newtown,ward no.-27, bidhannagar municipality
Bidhan Nagar F.S., New Town,
North 24 Parganas - 700102 .**

Sub :Fire Safety Recommendation for proposed construction of 2nos Block (i.e. A & B) of B+G+X storied upon a common basement and 2nos Block (i.e. C & D) of G+IV storied under group Residential Building in the name of "GLS Realty Pvt. Ltd." at premises no. R.S.&L.R. Dag no.-220,222,223,226,227,248, L.R. Kh no. 1025,740,177,585,2005,2007,132,146,237,634,657, 967,1024,1029, 1143,577, J.L. no. 19, Mouza – Thakdari, R.S. No. 216, Touzi no. 10, Ward no. 27 (New), under Bidhannagar Municipal Corporation, P.S. Newtown, 24Pgs(N).

This is in reference to your Application No. IND/WB/FES/20172018/4944,dated 11/04/2018, regarding the Fire Safety Measure for proposed construction of 2nos Block (i.e. A & B) of B+G+X storied upon a common basement and 2nos Block (i.e. C & D) of G+IV storied under group Residential Building in the name of "GLS Realty Pvt. Ltd." at premises no. R.S.&L.R. Dag no.-220,222,223,226,227,248, L.R. Kh no. 1025,740,177,585,2005,2007,132,146,237,634,657, 967,1024,1029, 1143,577, J.L. no. 19, Mouza – Thakdari, R.S. No. 216, Touzi no. 10, Ward no. 27 (New), under Bidhannagar Municipal Corporation, P.S. Newtown, 24Pgs(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 favour of the aforesaid building subject to the compliance of the following fire safety measure.

Recommendation:

1. CONSTRUCTION:

1. The whole construction of the proposed buildings 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 buildings shall be made of low flame spread materials conforming to I.S. specifications.
3. Provision of ventilation at the crown of the central core-duct of the buildings shall be provided.
4. 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.

2. OPEN SPACE & APPROACH:

1. The open spaces surrounding the buildings shall conform the relevant building rules as well as permit the accessibility and maneuverability of Fire Appliances with turning facility.
2. The approach road 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 4.5 and 5 M respecting abutting the road.

3. STAIRCASE:

1. The staircase of the buildings shall be enclosed type. Entire construction shall be made of bricks / RCC type having Fire Resisting Capacity not less than 2 hours.
2. The staircase of the buildings shall have permanent vents at the top and operable sashes at each floor level in the external wall of the buildings.
3. The width of the Staircase shall be made as shown in the plan. Corridors and the exit doors shall conforming the relevant building rules.
4. All the staircases shall be extended up to terrace of the building and shall be negotiable to each floor without entering into any room.

5. Fire & Smoke doors at the entrance of the staircase enclosures as marked in the plan at each floor level shall be provided. The F.C.D. shall be of the two hour Fire resisting Wire Glass Window fitted with self closing type openable in the direction of escape.

4. LIFT:

1. The walls of the lifts enclosure shall be at least two hours Fire Resisting type.

2. Collapsible gate shall not be permitted.

3. In case of failure of normal electric supply, it shall automatically trip of alternate supply and also shall have manually operated change over facility. Alternatively, the lift shall be so wired that in case of power failure, it comes down at ground level stands still with door open.

4. All other requirements shall confirm the I.S. specification including the communication facility in the lift cars connecting with the Fire Control Room of the buildings.

5. REFUGE AREA:

1. Refuge area of not less than 15 cm² shall be provided on the external wall with cantilever projection or other suitable means as shown / marked in the plan of the buildings.

2. The Refuge area shall be of Fire resisting construction and protected with self closing FCD at the entrance from the corridor or the staircase lobbies.

3. The position of Refuge area shall be such that they are negotiable by the fire service ladder from the ground.

6. BASEMENT:

1. The Basement shall be adequately ventilated.

2. Additional staircases from the open air as shown in the plan drawing shall be constructed besides the ramp confirming relevant I.S. specification.

3. The basement shall be protected with Automatic Sprinkler System, Smoke detectors and Hose Reel Hose etc.

4. 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 smoke detectors or sprinklers. It shall also have an arrangement to start it manually.

5. Mechanical extractor shall have an alternate source of supply.

7. FIRE FIGHTING WATER :

1. Underground water reservoir having water capacity of 200000 Ltrs. and O.H.W.R. 20000 ltrs (to be provided in Block- A / B) capacity exclusively for firefighting purpose with replenishing arrangement @ 1000 ltrs/min. preferably from two different sources of water supply shall be provided.

2. The water reservoir shall be kept full at all the time.

3. The Fire water reservoir shall have overflow arrangement with the domestic water reservoir as well as to avoid stagnancy of water.

8. WATER LAYOUT SYSTEM:

1 The building shall be provided with Wet Riser of 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 2850 ltrs/min. at the ground floor level outlet and minimum 900ltrs/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 Hose in conjunction with Wet Riser shall be made at each floor level and confirming the relevant I.S. Specification.

3 Ring Main Hydrant with provision of adequate numbers of Hydrants shall be installed surrounding the building in accordance with relevant I.S. specifications.

9. 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 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.

10. Sprinkler Installation:

Auto Sprinkler system shall have to be provided inside the basement and Banquet Hall as per I.S. 9972 and alarm gang to be incorporated along with the sprinkler system. Testing Sprinkler line shall be provided.

11. 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 Electrical distribution system shall conform all the requirements as laid in I. S. 1646-1982.

3 The electrical installation shall be adequately protected with automatic CO2/D.C.P.

4 All electrical installation viz. Transformer Switch Gear L. T., H. T. rooms shall be protected with both auto detection and suppression systems as per suitability.

5 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, etc. and also for illuminating the Staircase, corridors etc. and other places of assembly of the building incase of normal power failure.

12. DETECTION AND 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, at 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. Hooter will be sounded in such a manner so that an operation of a Detector or Manual Call Point Hooters will sounded on the same floor and immediate alternate floor.

3. Smoke detector shall have to be installed in the basement and Banquet Hall.

4. Public Address System :-

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

13. **FIRSTAID FIRE FIGHTING SYSTEM:**

First Aid firefighting 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. 2190-92.

14. **GENERAL RECOMMENDATIONS:**

- 1 Fire License shall have to be obtained for proposed storing and processing with L.P.G. and 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 occupants 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 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.
- 8 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 and Fire Safety arrangements and installation of the building.

15. 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.

Director
West Bengal Fire & Emergency Services

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