

**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/20192020/62328

DATE: 31/12/2019

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

To :
SHREE BUILDER'S & DEVELOPERS
Plot No- 72(RS),263,265(LR), RS.Kh.No-35, JL.No-95(RS),109(LR), Mouza-Shankarpur,
Durgapur
Durgapur F.S., N.T.P.S. Durgapur PS,
Paschim Bardhaman - 713212 .

Sub :Fire Safety Recommendation for a proposed construction of G + 10 storied under group Residential Building at the premises no.- Plot No- 72(RS),263,265(LR), RS.Kh.No-35, JL.No-95(RS),109(LR), Mouza-Shankarpur, Durgapur, N.T.P.S. Durgapur PS, Paschim Bardhaman.

This is in reference to your Application No. IND/WB/FES/20192020/62328, dated 31/12/2019, regarding the Fire Safety Measure for a proposed construction of G + 10 storied under group Residential Building at the premises no.- Plot No- 72(RS),263,265(LR), RS.Kh.No-35, JL.No-95(RS),109(LR), Mouza-Shankarpur, Durgapur, N.T.P.S. Durgapur PS, Paschim Bardhaman..

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 building shall be as per approved plan drawings conforming the relevant building rules of local municipal authority.
- 2.The interior finish decoration of the building shall be made with low flame spread materials conforming I.S. specifications.
- 3.Arrangements shall have to be made for sealing all the vertical and horizontal ducts by the materials of adequate Fire resisting capacity & the doors of service ducts / shafts of 2 hr. fire rating.

OPEN SPACE & APPROACH:

- 1.The open space 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 Fire appliances with turning facility.
- 2.The approach roads & internal drive ways 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 5.0 Mtr. and 5 Mtr. respecting abutting road.

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 up to date amendment.
- 4.All the staircases shall be extended up to the 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 staircase enclosures 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.

LIFT:

- 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 written at ground floor.
- 3.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.

4. Alternate source of power supply shall be provided for all lifts through manually operated change over switch.

REFUGE AREA :

1. Refuge area is not less than 15sqm. Shall be provided on the external wall with cantilever projection or other suitable means at 25.225 mtr. level of the building as shown in the plan.

2. The refuge area shall be of Fire Resisting construction and protected with self closing F.C.D. at the entrance from the corridor or the staircase lobbies.

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

FIRE FIGHTING WATER:

1. Underground Water Reservoir exclusively for Fire Fighting operation minimum 84,250lts. & O.H.W.R. for fire 29,200 as shown in the plan to be kept full at all time.

2. The Fire water reservoir shall be have overflow arrangement with the domestic reservoir to avoid stagnancy of water.

3. Provision of necessary manhole shall be made on the top of the reservoir as per specification.

4. Provision of replenishment at the rate of at least 1000 lts./min. from two separate source of water supplies shall be made.

5. The deep tube wells for the replenishment of the reservoir shall be incorporated with dual power supply unit.

6. Provision of placing Fire Appliances on the underground water reservoir to be made to draw water in case of emergency.

WATER LAYOUT SYSTEM :

Ring Main Hydrant System :

1. 100 mm dia Ring Main water layout arrangement along with one no. 3 way Fire Service inlet covering the entire premises of the project with provision of pillar type yard hydrants with door hose boxes & all accessories to be installed conforming I. S. 3844 – 1989 as amended upto date.

2. The system shall be so designed that shall always be kept charged with water under pressure and capable to discharge min. 900lts. / min. at the pressure 3.5kg /cm² at terrace level.

Down Comer & Hose Reels System :

1. The buildings shall be provided with 100 mm dia Down Comer system connected with the

terrace fire pump provision of outlets in each floor at the staircases landings / half landings with door hose boxes & all accessories as per I. S. Specification.

2. Provision of hose reel units on swiveling drum in conjunction with down comer near each landing valves shall be made at each floor level of the buildings.

3. All other requirements of the water based Fire Protection System shall be made as per I. S. Specification 3844 – 1989 (with upto date amendment).

FIRE PUMP :

1. Provision of the Terrace 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.

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 the Part 8 'Building Services, Section 2 Electrical and Allied Installations' of the N.B.C. and Section 7 of National Electrical Code 2011.

2. The electrical ducts shall be supply sealed at all floor level.

3. The electrical installation shall be adequately protected as per I.S. Specification with CO2/D.C.P. or High Velocity Projector/ Medium Velocity Projector System.

4. Arrangements shall have to be made to supply power with 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.

ALARM SYSTEM :

1. Manual call boxes incorporating with sounders connected with fire alarm panel shall be installed in all the floor area of the building in such a manner that maximum travel distance shall not be more than 22.5m in order to reach any of the call point.

2. All the installation shall also satisfy the I.S. Specification 2189:2008 as amended and the code of practice as laid down in N.B.C. part- IV.

AIRCONDITIONING SYSTEM(If any) :

1. The A.H.U shall be separated for each floor with the system of air ducts for individual floors.

2. Arrangements shall be made for isolation at the strategic locations by incorporating auto

dampers in the air conditioning system.

3.The system of auto shutdown of A.H.U shall be incorporated with the auto detection and alarm system.

4.Escape route like staircase, common corridors, lift lobbies etc, shall not be used as air passage.

5.The materials used insulating the ducts system(inside or outside) shall be of non-combustible materials, glass wool shall not be wrapped or secured by any material of combustible nature.

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.

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.Lightning protection for buildings shall be provided as per Part 8 'Building Services', Section 2 Electrical installations.

3.Fire Notice for Fire Fighting and evacuation from the buildings shall be prepared and be displayed at all vulnerable places of the buildings.

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

5.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.

6.Arrangement shall be made for regular checking, testing and proper maintenance of all the Fire Safety installation and equipments installed in the buildings to keep them in perfectly good working conditions at all times.

7.A crew of trained Fireman under the experienced Officer shall be maintained round the clock for safety of the buildings.

8.Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of the buildings.

9.Close circuit T.V. shall have to be provided for the entire floor area including the basement area of the buildings.

10.On compliance of all the above Fire Safety recommendations, the Director General, West Bengal Fire & Emergency Services shall be approached for necessary inspection and testing of the installation before occupancy of the buildings; 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 buildings.

N.B. : Any deviation and changes the nature of use of the buildings in respect of the

approved plan drawings, without obtaining prior permission from this office, this Fire Safety Recommendation will be treated as cancelled.

Director
West Bengal Fire & Emergency Services

Signature Not Verified
Digitally signed by TARUN
KUMAR SINHA
Date: 2019.12.31 12:08:33 IST