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Government Of West Bengal
Office Of The Divisional Fire Officer, Paschim Bardhaman
West Bengal Fire & Emergency Services
Asansol Fire Station, G.T. Road, P.O.:-Asansol,
P.S.:-Asansol(South), Pin :- 713301

Memo no.:FSR/0125186239100605 Date: 28-01-2024

From:
Divisional Fire Officer, Paschim Bardhaman
West Bengal Fire & Emergency Services

To: Proposed G7 storied Residential building of Sri Debabrata Bhattacharya and others
RS Plot No-804,805, LR Plot No-436,437, LR Khatian No-7118,7132, Mouza-Dhandabagh, JL No-118, PS-Durgapur, Dist-Paschim Bardhaman.

Sub: Fire Safety Recommendation of Proposed G7 storied Residential building of Sri Debabrata Bhattacharya and others RS Plot No-804,805, LR Plot No-436,437, LR Khatian No-7118,7132, Mouza-Dhandabagh, JL No-118, PS-Durgapur, Dist-Paschim Bardhaman.

This is in reference to your application no. 0125186239100605 dated 06-12-2023 regarding the Fire Safety Recommendation of Proposed G7 storied Residential building of Sri Debabrata Bhattacharya and others RS Plot No-804,805, LR Plot No-436,437, LR Khatian No-7118,7132, Mouza-Dhandabagh, JL No-118, PS-Durgapur, Dist-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 favor of the aforesaid building subject to the compliance of the following fire safety measure.

Recommendation:
CONSTRUCTION :

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

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 and all internal roads width shall not be less than 4.5m and 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 – 5 M respecting abutting the 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 width of the staircases shall be made as marked in the plan. Corridors and the exit doors shall conforming the relevant building rules
3.Fire and smoke door at the entrance of all the staircase enclosures at each floor level shall be provided. The FCD shall be of at least one our fire resisting . wire glass window fitted with self closing type open able 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.Fire and smoke door at the entrance of all the lift lobby enclosures at each floor level shall be provided. The FCD shall be of at least one our fire resisting capacity.

FIRE FIGHTING WATER:

1.Under ground water reservoir exclusively for Fire Fighting operation shall be ensuring minimum 50,000 lts. And overhead water reservoir of 20,000 ltrs. Capacity shall have to be provided
2.The fire water reservoir shall have overflow arrangement with the domestic reservoir to avert 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 1000lts. /min. from two separate sources of water supplies shall be made.
5.The deep tube wells for the replenishment of the reservoir shall be incorporated with the auto starting facility with the actuation of auto detection and suppression arrangement of the premises and shall also be connected with duel power supply units.
6.Provision placing Fire Appliances on the underground water reservoir shall have to be made to draw water in case of emergency.

.WATER LAYOUT SYSTEM:
Ring main Hydrant System:

1.150 mm dia Ring main water layout arrangement covering the entire premises of the project with provision of pillar type yard hydrants without door hose boxes, containing 2 lengths of 63mm delivery hose and short branch pipe shall be provided at all the strategic location and surrounding the building conforming I.S. 3844-1989 (up to date amendment).
2.The system shall be so designed that shall always be kept charged with water under pressure and capable to discharge min. 2280 ltrs./min. at the pressure 3.5kg/sq.cm. at any point.

Wet Riser & Hose Reels System :-

1.The building shall be provided with Wet Riser and Hose Reel unit with provision of outlets in each floor at the staircases landings/half landings as per suitable at the rate of one such unit of Wet Riser and Hose Reel per 1000 sq.m. of floor area.
2.The Wet Riser installation shall be made in reference to the height of the building in the form of 100mm dia riser with single hydrant outlet.
3.Hose Reel Unit:- Provision of hose reel units on swiveling drum in conjunction with wet riser near each landing valves shall be made at each floor level of the building.
4.All other requirements of the water base Fire Protection System shall be made as per I.S. Specification 3844-1989 (with up to date amendment).
5.Fire service inlet shall be installed on the entrance of the building.
Automatic Sprinkler Installation:

The Ground floor area shall be protected by automatic Sprinkler installation confirming the grade as per I.S. Specification. Water projector Protection:

The Electrical installation viz. transformer, HT, LT switch gear etc. shall be protected by high medium velocity water projector system as per suitability.

FIRE PUMP:

1.2280 Lts. Per min. giving a pressure not less than 0.3N/m2. The pump provided will be of multi stage type with suction and delivery size not less than 15 cm. dia. A set ball valve to supply the tank with at least 2850 ltrs. Per minute from the fire pump.
2.A stand by pump of equal capacity shall be provided preferably be diesel driven. Provision of Jockey pump have to be made to keep up the water based system under pressurized condition at all the time.

ELECTRICAL DISTRIBUTION SYSTEM:
1. Electrical distribution system of all the building shall be made in the form of concealed wiring or in heavy gauge M.S. conducted continuously bonded to earth cables shall be I.S. marked and preferably be F.R.L.S. categories.
2. Electrical distribution system shall conform all the requirement laid down in I.S. 1646-1982.
3.For every 23V wiring above false ceiling 660 grade insulated cable shall be used. Transformer switch gear H.T., L.T. and other electrical rooms shall be at the ground floor level and other electric rooms shall be at least 4 hrs. Fire resisting capacity, adequate ventilation arrangement shall have to be made in all the rooms, Dry and explosion proof type shall preferably be installed.
4. All electrical installation viz. Transformers, Switch Gears, L.T., H.T. rooms shall be protected with both auto detection and suppression system as per suitability.

5. Alternative Power Supply :
Arrangement shall be made to supply power with the help of a generator to operate at least the Fire pump, Pump for the deep tube well, Fire Alarm system, etc. and also for illuminating the staircase, corridors etc. and other place of assembly of the building in case of normal power failure.

DETECTION & 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, talk back 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.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 sounded on the same floor and immediate alternate floor.
4. Sprinkler Should be Installed in the Carparking place.

4.Public Address System :-

Public address system linked between all floors and Control Room shall have to be established.
AIR CONDITIONING SYSTEM (If any) :
1.The A.H.U. shall be separated for each floor with the system Air Ducts for individual floors.
2.Arrangement shall be made for isolation at the strategic locations by incorporating auto dampers 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 units room shall not be used for storage of any combustible materials.

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 :

1Fire License shall have to be obtained for proposed storing and processing with L.P.G. and other highly combustible articles.
2Fire Notice for Fire Fighting and evacuation from the building shall be prepared and be displayed at all vulnerable places of the building.
3Floor numbers and directional sign of escape route shall be displayed prominently.
4The 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.
5Arrangement 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.
6Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of 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.

Signature Not Verified

Digitally Signed.
Name: SHUVRANGSHU MAZUMDER
Date: 28-Jan-2024 22:28:19
Reason: Approved
Location: West Bengal

Divisional Fire Officer (Member Convenor),
Paschim Bardhaman
West Bengal Fire & Emergency Services