

# Government Of West Bengal Office Of The Divisional Fire Officer,Purba Bardhaman West Bengal Fire & Emergency Services Bhangakhuti, Purba Burdwan, P.O.:- Rajbati, Pin :- 713104

Memo no.:FSR/0125186200301178 Date: 07-07-2020

From:

The Divisional Fire Officer, Purba Bardhaman West Bengal Fire & Emergency Services

To: Sri Biswanath Kumar and Others,

Mouza: Kanainatsal, J.L. No. 76, R.S and L.R. Plot No. 152, 339 and 341, L.R. Kh. No. 947, 948, 949, 950, 951, 952, R.S. Kh. No. 34, 40, 53, Baikunthapur II G.P., P.S Burdwan, Dist. Purba Bardhaman, Pin 713103.

Sub: Fire Safety recommendation for the proposed construction of B+G+7 storied building under group residential cum commercial occupancy, in favour of, Sri Biswanath Kumar and Others, name & style as "Smart Homes" at the Premises/Holding no. Mouza: Kanainatsal, J.L. No. 76, R.S and L.R. Plot No. 152, 339 and 341, L.R. Kh. No. 947, 948, 949, 950, 951, 952, R.S. Kh. No. 34, 40, 53, Baikunthapur II G.P, P.S Burdwan, Dist. Purba Bardhaman, Pin 713103.

This is in reference to your application no. 0125186200301178 dated 07-07-2020 regarding the Fire Safety recommendation for the proposed construction of B+G+7 storied building under group residential cum commercial occupancy, in favour of, Sri Biswanath Kumar and Others, name & style as "Smart Homes" at the Premises/Holding no. Mouza: Kanainatsal, J.L. No. 76, R.S and L.R. Plot No. 152, 339 and 341, L.R. Kh. No. 947, 948, 949, 950, 951, 952, R.S. Kh. No. 34, 40, 53, Baikunthapur II G.P, P.S Burdwan, Dist. Purba Bardhaman, Pin 713103.

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 750m2 shall be suitably compartmented by separation walls up to ceiling level 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.
- 5. Arrangements shall have to be made for sealing all the vertical ducts by the materials of adequate Fire resisting capacity. Open Space & Approach:

- 6. The open space surrounding the building shall conform the relevant building rules as well as permit the accessibility and manoeuvrability of Fire appliance with turning facility.
- 7. The approach roads shall be sufficiently strong to withstand the load of Fire Engine weighting up to 20 M.T.
- 8. 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:
- 9. Provision for another stair case, accessible from each floor and each building and as remote from each other as practicable shall be made and they shall be so arranged that they are accessible in at least two different directions from every point in any open area, or from any door.
- 10. 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.
- 11. 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.
- 12. The width of the staircases shall be made as marked 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.
- 13.All the staircase shall be extended up to terrace of the building and shall be negotiable to each other without entering into any room.
- 14. 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 open able in the direction of escape.

## Fire Fighting Water:

15.Underground water reservoir having water capacity at 100,000 ltrs. and overhead reservoir of 30,000 ltrs. capacity exclusively for Fire fighting purpose with replenishing arrangements @ 1000 lts./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.

## Hydrant System:

- 16.150 mm dia Ringmain water layout arrangement covering the entire premises of the project with provision of piller 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 (upto date amendment).
- 17. The system shall be so designed that shall always be kept charged with water under pressure and capable to discharge min. 2400 ltrs./min. at the pressure 7kg/sq.cm. at any point.
- 18. 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 1000sq.m. of floor area.
- 19. The Wet Riser installation shall be made in reference to the height of the building in stage wise distributions.
- 1st Stage ground to 6th floor 150mm dia twin Hydrant outlet.
- 2nd Stage 6th Floor to Top Floor 100mm. Dia. Twin Hydrant opt let.
- 20. 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.
- 21.All other requirements of the water base Fire Protection System shall be made as per I.S.Specification 3844-1989 (with upto date amendment).

### Fire Pump

- 22.2850 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 15cm. dia with low level riser upto six storied and high level riser delivery for upper floors upto 52m. A set ball valves to supply the tank with at least 2850 ltrs. Per min. from the first pump. Alternatively a multistage, multioutlet pump may be installed.
- 23.A standby Pump of equal capacity shall be provided on alternative source of supply.
- 24. Electrical Installation & Distribution:

- 25. 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.
- 26. The vertical ducts shall be supply sealed at alternative floor level.
- 27. The major electrical installation shall be adequately protected with CO2/D.C.P. or Medium Velocity / Projector System. Alternative Power Supply:
- 28.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 the building in case of normal power failure.

Detection & Alarm System:

- 29.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.
- 30. 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 Refuge Floor:
- 31. The Refuge area is not less than 1.5 sqm. area shall be provided on the external wall as cantilever projection or any other suitable means at above 24.875 m., stair landing and additionally shown/marked in the plan.
- 32. The refuge areas shall be of Fire resisting construction and shall be protected with self closing F.C.D. at the entrance from the corridors at staircase lobbies.
- 33. The position of refuge areas shall be such so that they are negotiable by the Fire Service Ladder from the Ground.

Public Address System-

- 34. Public address system linked between all floors and Control Room shall have to be established.
- Air Conditioning System (If any):
- 35.The A.H.U. shall be separated for each floor with the system Air Ducts for individual floors.
- 36.Arrangement shall be made for isolation at the strategic locations by incorporating auto dampers in the Air Conditioning system.
- 37. The system of auto shut down of A.H.U. shall be incorporated with the auto detection and alarm system.
- 38. The air handling units room shall not be used for storage of any combustible materials.

First Aid Fire Fighting System:

39. 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:

- 40. Fire License shall have to be obtained for proposed storing and processing with L.P.G. and other highly combustible articles.
- 41. Fire Notice for Fire Fighting and evacuation from the building shall be prepared and be displayed at all vulnerable places of the building.
- 42. Floor numbers and directional sign of escape route shall be displayed prominently.
- 43. 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.
- 44. Arrangement shall be made for regular checking, testing and proper maintenance of all the Fire Safety installation and equipment's installed in the building to keep them in perfectly good working conditions at all times.
- 45.A crew of trained Fireman under the experienced Officer shall be maintained round the clock for safety of the building.
- 46. Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of building.
- 47. This shall be tested as provisional N.O.C. 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, Final N.O.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. 48.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 provisional N.O.C. will be treated as cancelled. Divisional Fire Officer, Purba Bardhaman West Bengal Fire & Emergency Services The authenticity of this document can be verified by accessing the URL: edistrict.wb.gov.in and then clicking on the 'Verification of Digitally Signed Document' link and keying in the Unique Number: 0125186200301178.