

**GOVERNMENT OF WEST BENGAL  
OFFICE OF THE DIVISIONAL FIRE OFFICER  
WEST BENGAL FIRE & EMERGENCY SERVICES**

Memo No : IND/WB/FES/20192020/85765

DATE: 05/03/2020

**From :**

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

**To :**

**G+5+1 STD RESI BLD(BLOCK A&B)OF SAIMA SYNERGYONE SOLUTIONS PVT LTD.OF RS.PLOT NO.514&515, LR.PLOT NO450,451,LR KH.NO 988,MOUZA-GOPALMATH,JL NO-3,DGP-3  
PROPOSED G 5 1 STORIED RESIDENTIAL (APARTMENT)BUILDING (BLOCK A & B)OF SAIMA SYNERGYONE SOLUTIONS PVT. LTD.OVER R.S.PLOT NO.514&515, L.R.PLOT NO.450,451,L.R.KHATIAN NO.988, MOUZA-GOPALMATH, J.L.NO.-03, P.S-DURGAPUR, DIST-PASCHIM BARDHAMAN.  
Durgapur F.S., Durgapur PS,  
Paschim Bardhaman - 713203 .**

**Sub :Fire Safety Recommendation for a proposed construction of G + 6 storied building under group Residential at the premises no.- PROPOSED G 5 1 STORIED RESIDENTIAL (APARTMENT)BUILDING (BLOCK A & B)OF SAIMA SYNERGYONE SOLUTIONS PVT. LTD.OVER R.S.PLOT NO.514&515, L.R.PLOT NO.450,451,L.R.KHATIAN NO.988, MOUZA-GOPALMATH, J.L.NO.-03, P.S-DURGAPUR, DIST-PASCHIM BARDHAMAN., Durgapur PS, Paschim Bardhaman - 713203**

This is in reference to your Application No. IND/WB/FES/20192020/85765,dated 05/03/2020, regarding the Fire Safety Measure for a proposed construction of G + 6 storied building under group Residential at the premises no.- PROPOSED G 5 1 STORIED RESIDENTIAL (APARTMENT)BUILDING (BLOCK A & B)OF SAIMA SYNERGYONE SOLUTIONS PVT. LTD.OVER R.S.PLOT NO.514&515, L.R.PLOT NO.450,451,L.R.KHATIAN NO.988, MOUZA-GOPALMATH, J.L.NO.-03, P.S-DURGAPUR, DIST-PASCHIM BARDHAMAN., Durgapur PS, Paschim Bardhaman - 713203.

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. RECOMMENDATIONS

### 1.CONSTRUCTION :-

- 1)The whole construction of the proposed residential building shall be carried out as per approved plan drawings conforming the relevant building Rules of Local Municipal Body.
- 2)The floor area exceeds 750m<sup>2</sup> shall be suitably compartments by separation walls upto 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. specification.
- 4)Provision of ventilation at the crown of the central core-duct of the building shall be provided.
- 5.Arrangement shall have to be made for sealing all the vertical ducts by the materials of adequate Fire resisting capacity.

### B.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 shall be sufficiently strong to with stand the load of Fire Engine weighting upto 20 M.T.
- 3)The width and height of the access gates into the premises shall not be less than 4.5 m and 5 M respectively abutting the road.

### C.STAIR CASE :-

- 1)The Stair case 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 Stair case 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 Stair cases 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 upto date amendments.
- 4)All the Stair cases shall be extended upto 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 Stair case 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.

**D.L I F T :-**

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 lifts shall be designed for FIRE LIFT shall be designed for Fire Lift. The word "FIRE LIFT" shall conspicuously be written at ground floor.

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**E.BASEMENT : (IF ANY ):-**

1)The Basement shall be adequately ventilated.

2)Additional Stair case from the open air as shown in the drawing shall be constructed besides the ramps conforming relevant I.S. specification.

3)The basement shall be protected with Auto Sprinkler system/Hose Reel system 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 heat/smoke sensitive detector or sprinkling. It shall also have an arrangement to start it manually.

5)Mechanical extractors shall have an alternative source of supply.

6)The Basement shall not be used other than car parking

**F.FIRE FIGHTING WATER :**

1.Underground water Reservoir having water capacity at 1,00,000. And Overhead Reservoir of 30,000 lts. Capacity exclusively for Fire Fighting purpose with replenishing arrangement @ 1000 lts/min. Preferably from Two different sources of water supply shall be provided.

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

3.The water Reservoir shall be kept full at all times.

## G.HYDRANT SYSTEM :-

1)The building shall be provided with Wet Riser 100 mm internal diameter pipe line with provision of landing valves at the Stair case 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 lts. /min. at the ground floor level outlet and minimum 900 lts./min. at the top most outlet. In both cases the running pressure shall not be less than 3.5 kgs/sq.m. All other requirements shall conform I.S. 3844-1899.

2)Yard Hydrant/Ring Main Hydrant with provision of four numbers Hydrant shall be installed surrounding the building in accordance with relevant I.S. specification.

## H.SPRINKLER INSTALLATION :

The automatic sprinkler installation shall be provided Basement in all floor areas of the building as per I.S. 1972. Alarm gang to be incorporated along with the sprinkler system.

## I.FIRE PUMP :

Provision of 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 preferably be of diesel driven type.

A separate Fire Pump shall preferably be made for the total Sprinkler installation or the building. 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 Commer with suitable terrace Pump fitted with overhead tank.

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## J.ELECTRICAL INSTALLATION & DISTRIBUTION :-

- 1.The electrical installation including transformers, Switch Gears, Min & 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 ducts shall be supply sealed at alternative floor level.
- 3.The electrical installation shall be adequately protected with Co2 /D.C.P. or Medium Velocity/Projector system.
- 4.Alternate Power Supply :-

Arrangement shall have to be made to supply power with the help or 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 Stair case, corridors etc. and other places of assembly of the building in case of normal power failure.

#### K.DETECTION,ALARM AND SUPPRESSION SYSTEM :-

- 1)Manually operated Electrical Fire Alarm system with at least four 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 Plant 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 or rooms where valuable articles have been kept. The other requirement of the system shall be made in accordance with I.S.2189-1988.
- 3.The suppression system shall be made with Fire Extinguishers and total flooding system with Co2/F.M 200 particularly in computer and Electrical processing and data room and in a room of irreplaceable articles.

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4.Hooters 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 alternative floor.

5.Public Address System :-

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

L.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.

M.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.

N.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 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 and experienced officer 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 Divisional officer, Birbhum Division. West Bengal Fire & Emg. Services certifying about the satisfactory services, performance of all the Life and Fire Safety arrangements and installation of the building.
  - 9)This Fire Safety Recommendations valid for one Year from the Date of Issue and Prior information is required for further extension the period.
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**Divisional Fire Officer**  
**West Bengal Fire & Emergency Services**

Signature valid  
Digitally signed by NITAI  
CHATTOPADHYAY  
Date: 2020.03.05 18:42:36 IST