



Government Of West Bengal
Office Of The Deputy Director
West Bengal Fire & Emergency Services
Station Feeder Road, P.O & P.S Siliguri,
District: Darjeeling, Pin - 734005

Memo no.:FSR/0125186238000033

Date: 17-04-2023

From:
Deputy Director
North Zone, HQ Wing,
West Bengal Fire & Emergency Services

To: ANIRBAN SAHA AND OTHERS,DEVELOPER HILLS BUILDER
AT.NETAJEE ROAD,MOUZA-DAMANPUR,J.L NO-51,KH. NO-7663,8289,9698,PLOT NO-783,HOLDING-633A,WARD
NO-3,P.S-ALIPURDUAR,DIST-ALIPURDUAR,PIN-736121.

Sub: Fire Safety Recommendation of Proposed construction of G+IV storied Residential Building under group of residential building in the name of ANIRBAN SAHA AND OTHERS,DEVELOPER HILLS BUILDER the Premises no – NETAJEE ROAD,MOUZA-DAMANPUR,J.L NO-51,KH. NO-7663,8289,9698,PLOT NO-783,HOLDING-633A,WARD NO-3,P.S-ALIPURDUAR,DIST-ALIPURDUAR,PIN-736121.

This is in reference to your application no. 0125186238000033 dated 28-03-2023 regarding the Fire Safety Recommendation of Proposed construction of G+IV storied Residential Building under group of residential building in the name of ANIRBAN SAHA AND OTHERS,DEVELOPER HILLS BUILDER the Premises no – NETAJEE ROAD,MOUZA-DAMANPUR,J.L NO-51,KH. NO-7663,8289,9698,PLOT NO-783,HOLDING-633A,WARD NO-3,P.S-ALIPURDUAR,DIST-ALIPURDUAR,PIN-736121.

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 drawing conforming relevant building rules of local administrative (Municipal/Panchayat) body.
- 2.The interior finish decoration of the building shall be made low flame spread materials conforming I.S. specification.
- 3.Provision of ventilation at the crown of the central core-duct of the building shall be provided.
- 4.Arrangement shall have to be made for sealing all the vertical ducts by the materials of adequate fire resisting capacity.

OPEN SPACE & APPROACH

- 1.The open space surrounding the buildings shall conform the relevant building rules as well as permit the accessibility and

manoeuvrability of fire appliances with turning facility having minimum 6.5 M width in each side.

2.The approach roads shall be sufficiently strong to withstand load of fire engine weighing up to 45 M.T.

3.The width and height of the access gates into the premises shall not be less than 4M and 5M respectively abutting the road.

4.Drive way should be free from any type of obstruction. No parking will be allowed on the drive way.

5.All the Passage way should be kept clear for free access.

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 walls of the building.

3.The width of the staircase shall be made as marked in the plan. Corridors and the exit doors shall conform the relevant Building Rules with up to date amendment.

4.All the staircase shall be extended up to terrace of the building and shall be negotiated to each floor.

LIFT:

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

2.Collapsible gate shall not be permitted.

3.One of the lift shall be designed for Fire Lift. The word "FIRE LIFT" shall conspicuously written at ground floor.

AIR-CONDITIONING SYSTEM:- (SPLIT TYPE)

Peak summer is in full swing. During this period, chances of fire incidents become more imminent due to heavy current drawn by AC units. The following precautions must be scrupulously followed so as to avoid possibility of fire incident due to Window / Split type AC unit.

1.Joints must be avoided in AC wires. It is generally found that there are multiple joints in AC wires which is the single most common cause of Electric Fire due to heat generated in it which spreads quickly to inflammable materials like curtains, paper files etc.

2.It must be ensured that all AC units are comprehensively serviced before operation and filter is cleaned regularly through authorized service agency which increases cooling as well as results in less electric consumption.

3.Never use AC units on normal plug points or temporary extension boards except on covered MCB's.

4.Switch off air-conditioners, lights, fans, exhaust fans, heat convectors, fax machines, computer monitors, printers /scanners/UPS, inverters, photocopiers, TVs and other office equipment when they are not in use. Switch on only those lights fans, air-conditioners or other equipment which are required for functioning office. Do not leave air-conditioners, heat convectors, lights, fans and other electrical equipment and gadgets in 'ON' position when not required.

5.Keep the doors / Windows of air-conditioned rooms close to avoid loss of conditioned air. Provide automatic door closers.

6.Use air-conditioner fan/blowers and fans at low speed.

7.In summer reduce load on air-conditioners by putting curtains/blinds/shades on windows.

8.Window type air-conditioners/split type AC's being highly energy intensive equipment; they should be serviced at least thrice in a year as per the recommendations of manufacturers, The servicing included cleaning of air filters, cleaning of condensers/cooling coil, service and oiling of fan motors, checking of fasteners, checking of electrical spares, checking of current/voltage and checking of room temperature and grill temperature.

9.Replace old air-conditioners which have out-lived their useful life i.e. 7 years as per Competent authorized agency maintenance manual 2012 and have become unserviceable with star rated Energy Efficient air conditioners.

AIR-CONDITIONING SYSTEM:- (WINDOW TYPE)

Some of the preventive measures are produced below which can help in reducing the chances of fire.

1. Switch off all Electrical/Electronic equipment when leaving office- it is noted that in some rooms Electrical/Electronic gadgets are not switched off after office hours, which becomes a major fire risk during night. To avoid fire incidents due to overheating/short circuiting of these equipment it must be ensured that all Electrical/Electronic gadgets are switched off after use/ office hours.
2. Don't plug too many Electrical appliances in one socket- It is found that in some of the rooms more than one Electrical/Electronic gadgets are used on one socket outlet with the help of extension boards. It should be ensured that only one equipment of suitable capacity be used on each socket to avoid overloading of the circuit.
3. Avoid arbitrary installation of AC units – It is seen that some departments / Ministries are putting AC units through private vendors on temporary wiring which may lead to fire due to overheating or short circuit. It is requested that no AC should be installed without getting clearance from Competent authorised agency.
4. No loose joints in AC wiring – Some ministries/ Departments are maintaining window/split type AC units through their private vendors. The ministries/Departments who are maintaining ACs through their private vendors must be ensured that there should not be any joint in the wire between socket outlet and AC unit because loose joints in the air conditioning wires can lead to electrical short circuit/fire. All AC wires should be joint free.
5. Good housekeeping – Good housekeeping reduces possibility of a fire occurring. Old unused furniture/Almirah's should not be placed in the rooms and staircases / corridors. All dead telephone/intercom wires should be removed before being replaced with new ones.
6. Clear space in front of switch board in the rooms – it must be ensured by occupants of the rooms that there should be clear space (minimum 60 cm) in front of switch boards located in the room. There should not be any combustible material near the switch boards.
7. All Electrical/ Electronic equipment purchased by various ministries/Departments must be ISI marked. Plug tops should also be ISI marked.

FIGHTING WATER:

Underground water reservoir having water capacity of 30000.ltrs. and overhead water reservoir having capacity of 5000 .ltrs. exclusively for fire fighting purpose with replenishing arrangements @ 1000 ltrs/min. preferably from two different sources of water supply shall be provided. The water reservoirs 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.

WET RISER SYSTEM IS:3844

100 mm dia ring main,100mm dia riser with single out let landing valve shall have to be provided.

Pumps for fire fighting Installation (IS 12469:1988):-

- i) The standard code of practice recommended that all water based fixed firefighting installations should be fed by two separate automatic pumps, one of which should act as stand by. Each pump should be designed to deliver water at required pressure and discharge, taking into account the height and volume of the building.
- ii) The Fire pumps should be provided near the underground static water storage tank with minimum pressure of 3.5 kg. / sq. cm. at terrace level or farthest point.
- iii) One electric and one diesel pump of capacity 1620 LPM and One electric pump of capacity 180 LPM should be install.
- iv) The pumps should be installed and arranged in such manner so that it will start automatically due to fall in pressure as prefixed in the installation by installing a Jockey pump. Provision of Jockey pump shall also be made to keep the water-based system under pressurized condition at all times.
- v) All the pumps shall be so designed as to supply water at the designed pressure and discharge into the water-based system which shall be installed in the buildings.

vi) All the pumps shall be incorporated with both manual and auto starting facilities.

HOSE REEL SYSTEM (IS 884:1985):-

i) Provision for Hose Reel in conjunction with wet riser shall be made at each floor of the building level from the underground reservoir through main pump conforming the relevant I.S. specification.

ii) The Hose reel hose system should be provided at each floor of the buildings. The internal dia of the said hose reel shall be 19 mm to 32 mm and the discharge capacity not less than 22.5 LPM. While the length of the hose reel not more than 36.50 meters. The distance of such installation should be in such a way that no part of the floor is more than 6 meters distance from a hose nozzle when fully extended.

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.

ELECTRICAL INSTALLATION AND DISTRIBUTION:

- 1.The electrical installation including Transformers, Switch Gear, 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.
- 2.The vertical and horizontal electrical ducts shall be sealed at each floor level by fire resisting materials.
- 3.The electrical installation shall be adequately protected with CO2/D.C.P. Fire Extinguishers conforming I.S. specification.
- 4.Transformer to be protected by High Velocity Water Spray Projection System as per relevant I.S. specification.
- 5.Arrangement for alternative power supply shall have to be made to supply power with the help of a generator to operate at least the Fire Pump, Deep Tube-Well Pump, Fire Alarm System etc. and also for illuminating the Staircase, Corridors, Lobbies etc. and other places of assembly of the building in case of normal power failure.

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 firefighting and evacuation from the building shall be prepared and be displayed at all vulnerable place of the building as per clause 4.11 Annex D of N.B. Code.
- 3.Floor number and direction sign of escape shall be displayed prominently as per clause 4.11 Annex D of N.B. Code.
- 4.The employees and security staff shall be conversant with installed firefighting equipment of the building on to operate in the event of fire and testing as per clause 4.11 Annex D of N.B. Code.
- 5.Arrangement shall be made for regular checking, testing and proper maintenance of all the fire safety installation and equipment installed in the building to keep them in perfectly good working conditions at all times.
- 6.Mock fire practice and evacuation drill shall be performed periodically with participation of all occupants of building.
- 7.Considering the gravity of growing hazard in the township, a crew of trained firemen under one experienced officer shall be maintained round the clock along with water tender (type-B) conforming I.S. 948 : 1983.

On compliance of all the above Life and Fire Safety Recommendation, the Director General, West Bengal Fire & Emergency Services shall be approved for necessary inspection and testing of all 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.

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