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Government of West Bengal

Office of the Director General

West Bengal Fire & Emergency Services

13D, Mirza Ghalib Street, Kolkata – 16

Memo No.: FSR/211862406300007845 **Date : 31-01-2025**

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

To :
Dtc Projects Private Limited
1, NETAJI SUBHAS ROAD, KOLKATA - 700001

Sub: Fire Safety recommendation for Proposed 6 Nos. Of Block i.e. Block-1 To 6 Comprising of (B+G+11) Storied each Residential Complex in the name & style of "DTC Projects Private Limited" at Dag No.- 330(P), 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 359, 360, Mouza - Humaipur, J.L No. 52 and Dag No.-322, 322/1145, 323(P),Mouza- Abdalpur, J.L No.-53, Ward No.- 04, Under Madhyamgram Municipality, P.S. - Barasat, Badu Road, North 24 Parganas, West Bengal..

This is in reference to your AIN 211862406300007845 dated 11-Nov-2024 regarding Fire Safety recommendation for Proposed 6 Nos. Of Block i.e. Block-1 To 6 Comprising of (B+G+11) Storied each Residential Complex in the name & style of "DTC Projects Private Limited" at Dag No.- 330(P), 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 359, 360, Mouza - Humaipur, J.L No. 52 and Dag No.-322, 322/1145, 323(P),Mouza- Abdalpur, J.L No.-53, Ward No.- 04, Under Madhyamgram Municipality, P.S. - Barasat, Badu Road, North 24 Parganas, West Bengal.

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 office is issuing Fire Safety Recommendation in favor of the aforesaid building for compliance of the following fire safety measure.

Recommendation :

Construction:
1. The whole construction of the building shall be carried out as per approved plan drawings conforming the relevant building rules of competent authority.
2. The floor area exceeds 750 m2 shall be suitably compartmented by physical compartmentalization or by water curtain as marked in the plan.
3. The interior finish decoration of the building shall be made low flame spread materials conforming I.S.

specifications.
4. Arrangement shall have to be made for sealing all the vertical and horizontal ducts by the materials of adequate fire resisting capacity.

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 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 4.5M and 5 M respecting 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 passages 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. Lift shall be designed for Fire Lift during emergency. The word “FIRE LIFT” shall conspicuously write at ground floor.
4. Exit doors of the lift lobby shall be through a self-closing FCD with proper fire resistance.
5. The electrical power shall be from separate supply mains in the building for the “Fire Lift” as well as pressurized firefighting shaft & the power supply shall be tripped to the alternative power supply in case of failure of normal supply on the emergency situation.

Fire Fighting Water:

Fire Fighting Underground Water Reservoir capacity of 1,50,000 Ltrs. & Overhead Water Reservoir capacity of 10,000 ltrs. at each block exclusively for Fire Fighting for each tower purpose with replenishing arrangements @ 1000 lts./min. preferably from two different sources of water supply shall be provided. The Fire Water Reservoir shall have overflow arrangement with the Domestic Water Reservoir as well as to avoid stagnancy of water.The priming tank of capacity of 1000 ltrs. shall be provided to the suction side of the pump to avoid negative suction. The water reservoir shall be kept full at all time.

Hydrant System:

1. The building shall be provided with Wet Riser at 150 mm. internal diameter with provision of landing valves at the staircase landing/half lading at 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 2850ltrs./Min. at the ground floor level outlet and minimum 900 Ltrs./Min. at the top most outlet. In both cases the running pressure shall not be less than3.5 kg/cm2 at top most point All other requirements shall conform I.S. 3844 :1989.
2. Provision for Hose Reel in conjunction with Wet Riser shall be made at each floor level conforming the relevant I.S. Specifications.
3. Yard Hydrant/Ring Main Hydrant of 150 mm internal diameter with provision of adequate numbers of Hydrant Point shall be installed surrounding the building accordance with relevant I.S. Specifications.
4. Fire service inlet shall be installed in front of the building in accordance with the relevant I.S. Specifications.
5. All other requirements of the water base Fire Protection System shall be made as I.S. Specification 3844:1989 (with upto date amendment).
6. Yard Hydrant (2 ways) shall have to be provided 30M interval of surrounding the building.

Pumps for Fire Fighting installation-

Provision of the Fire Pumps shall have to be made to supply water at the rate-designed pressure and discharge into the water based system consisting of:-

1. Two no. Electric pump (Jockey for Hydrant & Sprinkler) capacity 180 LPM,

2. Two no. Main pump (Hydrant & Sprinkler) capacity 2850 LPM,
3. One no. Diesel driven Stand by pump of capacity 2850 LPM.
4. A Separate Terrace Fire Pumps at each tower with the capacity of 900LPM shall be installed of the building.

All the pumps shall be incorporated with auto start panel.

Sprinkler Installation:

The automatic Sprinkler installation shall be provided entire Basement area, Covered parking area and as per suitability of the building as per I.S.9972. Alarm gong to be incorporated along with the Sprinkler System.

Multi-Layer Automated Mechanized Car Parking System:

1. Structural design: - The M.L.C.P. shall be constructed of structural steel construction.
2. Vertical Deck Separation: - For M.L.C.P. having Multi Car Parking level, vertical Fire separation between the upper and lower decks by using a non-perforated and non-combustible materials (Structural Steel Plate) shall be provided. This is to minimize direct impingement of flame to the Car in the upper deck and also to prevent dripping of any possible leaking fuel to the lower deck. Proper drainage system shall have to be provided for accidental leaking of oil from the car and sand bed shall be provided at the ground level.
3. Fire Engine Access way: - Access way shall be provided for the Fire Engine to gain access to the car park entrance and exit.
4. Fire Hydrant: - Fire hydrants are to be provided in accordance with Cl. 4.4
5. Natural Ventilation: -Each car parking deck shall be provided with at least 50% external ventilation openings of the perimeter wall areas and uniformly distributed.
6. Sprinkler & Detection System: - Open Modular Type Sprinkler along with detectors shall be provided in all M.L.C.P. areas as per relevant I.S. Specification. Cross zone wise sprinkler system shall have to be implemented.

Operating System: - Both Mechanical and Manual type operating system shall have to be provided.

Detection and Alarm System:

1. Manually operated Electrical Fire Alarm System with at least adequate numbers of break glass type call boxes fitted with Hooters along with Public Address System at each floor connecting with visual panel board shall be made in Control Room. The Control Room shall be located at 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 Smoke Detectors shall be installed in shop area, corridor places of below and preferably above false ceiling of the building. The system shall also be made in place 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. Hooters will be sounded in such a manner so that an operation of a Detectors or Manual Call Point. Hooters will be sounded on the same floor and immediate alternate floor.
4. Public Address System linked between all floors and Control Room shall have to be established.

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 per relevant I.S. specification .
2. The electrical installation shall be adequately protected with CO2/D.C.P. Fire Extinguishers.
3. Electrical installation should be tested by the licensed electricians periodically.
4. The vertical & horizontal ducts shall be sealed at alternative floor level.

Transformer :

1. A substation or a switched station with oil filled equipment shall not be located in the building.
2. The substation structure shall have separate fire resisting was surroundings and necessarily be located at the periphery of the flow having separate access from the fire escape staircase.
3. The outside walls ceiling, floor, opening including doors & windows to the substation area shall be provided with a fire resisting door of 4 hours fire rating.
4. Direct accesses to the transformer room shall be provided, preferably from outside the fire escape staircase.

Alternative Power Supply:

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 assembly of the building in case of normal power failure.

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 System First Aid FireFighting 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 – 2010

Small Gears: IS : 903 -1993:-

Hose box, 15 M length delivery hose, Gun Metal short branch of half inch dia. One set at each half landing hydrant should be installed.

General Recommendation:

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 routes shall be displayed prominently.
4. Telephone numbers of all emergency services/Department to be kept in counter and displayed in conspicuous places.
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 Fire Safety installation and equipment's installed in the building 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 building.
8. Mock Fire practice and evacuation drill shall be performed periodically with participation of all occupants of building.
9. "NO SMOKING" sign to may be displayed in prominent place in Hindi, English and local languages.
10. A certificate is to be obtained from the Director General, West Bengal Fire & Emergency Services certifying about the satisfactory services, performance of all the Life and Fire Safety arrangements and installation of the building.

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.

Signature Not Verified

Digitally Signed.
Name: ABHIJIT PANDEY
Date: 31-Jan-2025 17:56:56
Reason: D-Sign
Location: E-Dist 2.0

Director

West Bengal Fire & Emergency Services