

GOVERNMENT OF NATIONAL CAPITAL TERRITORY OF DELHI

DIRECTORATE OF DELHI FIRE SERVICE, NEW DELHI - 110001

No. F 6 / DFS / MS / BP / 2016 /

195

Dated. 17/08/16

To

The Chief Architect,
Department of Architecture and Environs
New Delhi Municipal Council,
Palika Kendra, New Delhi.

Subject: Regarding approval of revised Bldg. Plans from fire safety point of view in r/o 27, K.G. Marg, New Delhi.

Sir,

This has a reference to your letter no. CA/BP/27, K.G. Marg, ND /D-1082-84 dated 20.07.2016 on the subject cited above. In this connection, this is to inform you that the revised building plans in respect business building have been scrutinized by this department from fire safety point of view and observed that building block is proposed to be constructed on a plot having area 4795.48sqm. The proposed building blocks will be comprised of four basements, ground plus nine upper floors. The height of the proposed building blocks upto terrace level is 42.70m. The proposal for 4B+G+8 business building with height 35.70m on this plot was cleared by this department vide this office letter no.2437 dated 20.08.2010.

The plot abuts on 25m wide road and the building is approachable by 6m wide gates. 02 nos. staircases of 1.5 m width each from 4th basement to ground, ground to terrace floor have been proposed in the block. One lift is proposed to be provided from fourth basement to ground floor and 05 lifts are proposed to be provided from ground floor to 9th floor.

S No	Floor	Covered Area (sqm)	Occupancy
1.	1 st basement	2111.71	Parking, electric substation, services
2.	2 nd to 4 th Basement	2005.47	Parking Mechanical (single enclosure)
3.	Ground	865.43	Shop
4.	1 st floor	819	Shop
5.	2 ND floor	820.86	Office
5.	3 RD to 8 th floor	888.41	Office
6.	9 TH	817.63	Office

Open set back area is not checked as it shall be checked by concerned building sanctioning authority. The fire safety arrangements such as over head and underground water storage tank, fire extinguishers, hose reel, wet riser, yard hydrants, manual operated electric fire alarm system, detection system, sprinkler system, pumps are proposed to be provided in the buildings. The approval of building plans shall be valid only for the present layout of the floors shown on the plans, any subdivision of the floors shall only be done by ensuring the proper means of escape, with the prior approval of this department.

There is no objection to this department for the construction of the said buildings subject to the compliance of the following fire safety recommendations.

1. **Access to building:** The plot abuts on 25m wide road and main entrance to the premises shall be of 6m to allow easy access to the fire fighting appliances. The entrance gate shall fold back against the compound wall of the premises thus lending the exterior access way

with in the plot, free for movement of fire service vehicles. The archway, if any, shall not be at a height less than 5 m it must be ensured that 9m access roads all around building and 12m at turning circle must be kept clear all the time for free movement of fire engines.

2. **Number, Width, Type and arrangement of exits:** As proposed on the plans, 02 nos. staircases of 1.5 m width each from basement to ground, ground to terrace floor have been proposed in the block. one lift is proposed to be provided from fourth basement to ground floor and 05 lifts are proposed to be provided from ground floor to 9th floor. The clear-cut width of the staircases/exits shall be maintained at the time of completion and exits/staircases shall meet the requirement of UBB1 -2016. The width of the doors shall not be less than the width of the staircases excluding framework.

Out of 02 nos. of staircase in block, one staircase as marked on the plan shall be fire tower, as per clause 9.3.13 of UBB1 -2016.

3. **Protection of exits by means of fire check door(s) and or pressurization:** The fire check doors of minimum 2hrs fire resistance rating shall be provided as marked on building plans.
4. **Compartmentation:** The building shall be suitably compartmentalized so that the fire smoke remains confined to the area where fire incidents has occurred and does not spread to the remaining part of the building. The services, standby generator, store etc. must be segregated from other by erecting fire-resisting wall of not less than 04 hours rating. Each of the compartments (as per NBC Part - IV) must be individually ventilated and the opening for entry into each of these compartments must be fitted with self-closing fire/smoke check doors of not less than 02 hour fire rating fitted with magnetic latches.
 - i. All electric cables shall be laid in separate shafts and each shaft shall be sealed at every floor with fire resisting material of similar rating. The shafts shall be of minimum 02 hours fire rating.
 - ii. Under no circumstances, two services shall pass through the same shaft, i.e., separate shaft be used for different purpose.
 - iii. All vertical and horizontal openings at each floor in entire building shall be sealed properly with the non-combustible material. Wherever false ceiling / suspended ceiling is provided, the same shall be of non-combustible in nature and compartmentation shall be extended up to ceiling level.

Compartmentation shall conform to clause 8.4.6 of UBB1 -2016 & NBC -IV.

5. **Smoke Management system:** Smoke venting facilities shall be provided as per NBC - Part 4, Fire and Life Safety.
6. **Fire Extinguishers:** The portable fire extinguishers of ISI mark suitable to risk shall be provided and maintained in accordance with IS: 2190-1992.
7. **First Aid Hose Reels:** A hose reel containing 30 m of length of 20 mm bore terminating into a shut-off nozzle of 5 mm outlet connected directly to riser shall be provided. It shall conform to IS: 884/1988.
8. **Automatic Fire Detection and alarming systems:** Automatic fire detection system i.e. smoke / heat detection system shall be provided in all the areas of the building. The system shall be connected to fire alarm system and shall conform to IS: 2189 /1999.

9. **MOEFA (Manually Operated Electric Fire Alarm):** Manual Call Points (MCP) shall be provided near to escape points and the same shall conform to IS 2189/1999.
10. **Public Address System:** The system shall be provided having loud speakers on each floor level in common areas. The microphone, amplifier and control switches of P. A. System shall be installed in the fire control room / security room.
11. **Automatic sprinkler system:** The automatic sprinkler system shall be installed in entire building in accordance with IS: 15105/2002. Flow alarm switch/gong bell shall be incorporated in the installation for giving proper indication/sound. The pressure guage shall also be provided near the testing facility. The entire system including pump capacity & head, size of pipe network, orifice plate etc. shall be provided in accordance with the relevant code. Basements shall be protected with high density sprinklers. Fire service inlet shall also be provided at ground floor level.
12. **Internal Hydrants and Yard Hydrants:** The Wet riser and yard hydrants system shall be provided in both blocks as per IS 3844/1989. Its design shall be such that it can be readily opened in an emergency. Each box shall contain two lengths of 63 mm diameters, 15 m length, rubber line delivery hoses conforming to IS : 636 complete with 63 mm instantaneous coupling conforming to IS :903 with nozzle of 16 mm diameter.
13. **Pumping arrangements:** As proposed pump house comprising two numbers electrically driven pump, automatic in operation having capacity 2850LPM shall be provided for hydrant and sprinkler system. One diesel engine driven standby pump of capacity 2850LPM shall be provided. Two jockey pumps of 180 LPM capacity shall be provided. The pumps shall be 70m head. All the pumps shall be automatic in operation.
14. **Captive Water Storage for firefighting:** As proposed pump house each comprising an underground water storage tank of capacity 200000 liters, overhead water storage tank on the terrace having 20,000 liters capacity shall be provided for fire-fighting system. The replenishment through bore well or from the town mains shall be ensured @ 1000 LPM. This shall conform to the requirements given in NBC Part-IV. Fire Service Inlet shall also be provided.
15. **Exit Signage:** Exit signs shall be provided in the building at appropriate locations. Floor level marking, all exits and exit way marking signs in entire complex must be illuminated and wired to independent circuit supplied by alternate source of power supply. Wiring for the illuminated exit signs shall be suitably protected against fire. Illuminated / glowing strips paint shall be provided at each level to guide the direction for escaping towards a safe place. The sizes and color of the exit signs shall be as per IS 9457:1980.
16. **Provision of Lifts:** The lifts must be equipped with a Fireman's grounding switch so that, it is possible to ground the lift during a fire / emergency. In case of failure of normal supply, it shall automatically trip over to the alternate supply. Suitable slope in the floor of lift lobby shall be made to prevent water, used during fire fighting etc. at any landing from entering into lift shaft. All other conditions and provisions shall be provided strictly in accordance to Clause C-1.5 (a to q) of Part-IV of National Building Code of India. One of the proposed lift shall also be fire lift.
17. **Standby Power Supply:** Entire fire safety system, such as Emergency lighting, Exit Signs, Staircase lighting circuit, Lift, Fire Pumps, smoke extraction system and pressurization shall be powered from an additional sources of power supply like generator / Battery backup / inverter and shall be automatic in action.

18. **Refuge Area:** As proposed on the plans, refuge area measuring 59.575sqm shall be provided at 6th floor and shall be connected with staircases as shown on the plans. This shall conform to the requirements given in NBC Part-IV.
19. **Fire Control Room:** Fire control room shall be established at ground floor near entrance gate. A Qualified Fire Officer and trained staff shall be appointed in the building to look after the fire protection arrangements in the building.
20. **Special Fire Protection Systems for protections of Special risks:** The electric sub-station, if constructed, installation of Transformer, LT & HT panels shall be as per the provisions specified by the Electrical Authority. However, the following points shall be followed:
- The HT & LT panels shall be separated with the walls of 2 hours fire resistance rating. It is necessary to separate shield wall extending up to the one meter on sides above the highest point of the transformer.
 - The electric distribution cables/wiring shall be laid in a separate duct. The duct shall be sealed at every floor with non-combustible materials having the same fire resistance as that of the duct. Low and medium voltage wiring running in shaft and in false ceiling shall run in separate conduits.
 - Water mains, telephone lines, intercom lines, gas pipes or any other service line shall not be laid in the duct for electric cables; use of bus ducts/solid rising mains instead of cables is preferred.
 - Separate circuit for firefighting pumps, staircases and corridor lighting and blowers for pressurizing system shall be provided directly from the main switch gear panel and these circuits shall be laid in separate conduit pipes, so that fire in one circuit will not affect the others.
 - The inspection panel doors and any other opening in the shaft shall be provided with air tight doors having fire resistance of not less than 2 Hrs. the electric installations shall be as per BIS 1646.

It shall be ensured that provisions of all requisite fire and life safety measures stipulated in UBBL-2016 and National Building Code of India shall be complied in letter and spirit before the occupancy of the building under intimation to this department. For any complaint/grievances regarding building permit, please contact on mail id hpc_buildingpermit@dda.org.in.

Yours faithfully,


(Aml Garg)

Chief Fire Officer
Tel.011-23414286

Copy to:

1. Ar. Kanwal Thareja, 2/21, GF, Sarvpriya Vihar, New Delhi-16.
2. Sh. Sanjeev Jain, M/S Primetime Realtors Pvt. Ltd., 6th Floor, Arunachal Building, 19, Barakhamba Road, New Delhi.