

GOVERNMENT OF NATIONAL CAPITAL TERRITORY OF DELHI
HEAD QUARTERS: DELHI FIRE SERVICE: NEW DELHI - 110 001

No. F. 6. / DFS / MS / BP / 2022/ 343

Dated: 27/07/2022

To,

The Executive Engineer -I (Bldg.)HQ,
 Municipal Corporation of Delhi,
 9th Floor, Civic Centre, Minto Road,
 New Delhi – 110002.

Sub: Clearance of online building plans in r/o proposed design of consulate Apartment at Plot in Khasra No. 112/2 (5-9), extended Lal Dora Abadi of Village – Dhoolsiras Firni Road, Tehsil – Dwarka, New Delhi.

Sir,

Please refer your online ID No. 10104543 dated 23.07.2022 on the subject cited above. In this connection it is to inform you that the referred online building plans have been examined from fire safety point of view and observed that there is a proposal of construction of three Residential Towers (Tower – A and Tower B & C) at Plot in Khasra No. 112/2 (5-9), extended Lal Dora Abadi of Village – Dhoolsiras Firni Road, Tehsil – Dwarka, New Delhi on a plot area of 4594.87 m². The plot abuts on 19.8 meter wide road and accessible through 10.0 meter wide main gate. The detail of covered area, height, use etc. is as under:

S. No.	Description → Name of Block ↓	Height of Building (M)	No. of floors	Covered area (SQM) Floor-wise		Use	No. and width of staircases	No. of lifts
1	Tower – A	39.9	G+12	Ground	486.00	Residence	02 (1.5 m)	03
				1 st to 12 th	486.00			
2	Tower – B & C	39.9	G+12	Ground	354.96	Residence	03 (2- 2.0 m & 1- 1.5 m)	03
				1 st & 12 th	354.96			
3	Basement	--	Two tire	Basement – 1	2912	Parking & Services	04 (2- 2.0 m & 2 – 1.5 m)	06
				Basement - 2	2912	Parking	04 (2- 2.0 m & 2 – 1.5 m)	06

There is no objection to this department for the construction of proposed Residential Towers subject to the compliance of the following fire safety recommendations:

- Access to building:** The plot abuts on 19.8 meter wide road and the premises is approachable through 6.0 meter wide main gate. The entrance gate shall fold back for free movement of fire service vehicles against the compound wall of the premises thus leaving the exterior access way with in the plot. The archway, if any, shall not be at a height less

Consulate Apartment at Plot in Khasra No. 112/2 (5-9), extended Lal Dora Abadi of Village – Dhoolsiras Firni Road, Tehsil – Dwarka, New Delhi.

than 5 meters. Clear-cut 6.0 meter wide road for fire tender movement with 9.0 meter turning radius shall be ensured all around each high rise blocks, for free movement of fire tender as marked on the plans as per clause 8.2 of UBBL-2016.

2. **Number, width, Type and Arrangement of Exits:** As per the above table, staircases are proposed in the buildings. All staircases shall be continuous to terrace. Staircases, serving from basement, shall be segregated on ground floor. Further, out of the aforesaid staircases one staircase has been made fire tower in each tower. The fire towers shall meet the requirement of clause 9.3.13 of UBBL – 2016. The staircases shall meet the requirements of UBBL-2016. Clear-cut width of staircases, corridor and doors shall be maintained at the time of completion.
3. **Protection of exits by means of fire check doors and or pressurization:** The fire check doors of minimum 2 hrs. fire resistance rating shall be provided as marked on plans. Pressurization system for lift well and lift lobbies/ staircases or corridors shall be installed as per NBC Part IV and as per clause 9.3.2 of UBBL-2016. The fire check doors shall conform to IS 3614:2021.
4. **Compartmentation:** Floors of buildings shall be suitably compartmentalized so that the fire / smoke remain confined to the area where fire incidents have occurred and does not spread to the remaining part of the building. This shall conform to clause 8.4.6. of UBBL-2016 and clause 4.5 of NBC part-4.
5. **Smoke Management System:** Smoke venting facilities in buildings shall be provided as per NBC Part IV, Fire and Life Safety.
6. **Fire Extinguishers:** The portable fire extinguishers of ISI mark suitable to risk shall be provided in buildings in accordance with IS -2190/ 1992.
7. **First aid Hose Reel:** Hose reel containing 30 m length of 20 mm bore terminating into a shut-off nozzle of 5 mm outlet connected directly to riser shall be provided in buildings. This shall conform to IS: 884/1998.
8. **Automatic Fire Detection and Alarming Systems:** Not applicable.
9. **Manually operated fire alarm system:** Manually operated fire alarm call points with talk back system at suitable locations on each floor of towers shall be installed as per National Building Code and the same shall conform to IS-2189/1999.
10. **Public Address System:** The public address system shall be provided in building, having loudspeakers in the common area. The microphone, amplifier and control switches of public address system shall be installed in the Fire Control Room as per UBBL-2016.
11. **Automatic Sprinkler System:** The Automatic sprinkler system shall be installed in basements in accordance with BIS: 15105 / 2021 and as per Annexure H of NBC-Part-4, 2016. Flow alarm switch/gong shall be incorporated in the installation for giving proper indication/sound. The pressure gauge shall also be provided near the testing facility. The entire system including pump capacity and head, size of pipe network, orifice control etc. shall be provided in accordance with the relevant code. Fire service inlet shall also be provided at ground floor level.
12. **Internal Hydrant and Yard Hydrant:** Wet riser system in Both Towers near staircases shall be provided as per IS 3844-1989. Hose box of suitable dimension shall be provided near each internal hydrant. Its design shall be such that it can be readily opened in an emergency. Each box shall contain two lengths of 63 mm diameter, 15 m length, rubber lined delivery hoses conforming to IS: 636 complete with 63 mm instantaneous coupling conforming to IS: 903 with a nozzle of 16 mm diameter. Yard hydrants are not required.
13. **Pumping Arrangements:** One fire pump house having one electric pump of 2280 LPM capacity, one standby diesel pump of 2280 LPM, one electric pump of 2280 LPM capacity for water curtain, and one jockey pump of 180 LPM capacity is proposed for both towers and basements. The suitable orifice plate /reducer shall be provided to maintain the requisite pressure of 3.5 Bars at the remotest point. All the pumps shall be automatic in operation. This shall conform to NBC-IV.

- 14. Captive Water Storage for fire fighting:** One underground fire water storage tank of 1,50,000 liters capacity shall be provided for firefighting only. Further, one overhead water tank of 5,000 liters capacity each shall be provided on the terrace of towers. The overhead fire tank shall be made of steel/RCC. The underground water storage tanks shall be approachable by the fire engine. Draw off connection/ fire service inlet shall be provided. The replenishment through bore well or from the town main be ensured @ 1000 LPM. One ladder or any other form of open access to the overhead fire water tank for inspection, shall be provided as per clause 7.10.3 of UBBL-2016. This shall conform to the requirements given in National Building Code of India Part IV/UBBL-2016.
- 15. Exit Signage:** Exit signage shall be provided in all buildings at appropriate locations. Floor level marking, all exits and exit way marking signs on all floors 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 paint strips shall be provided at each level to guide the direction for escaping towards a safe place. The size and colour of the exit signs shall be as per IS 9457: 1980.
- 16. Provision of lifts:** Lifts, as mentioned in the table above, are proposed to be provided in the building. The lifts shall 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 E-3 of National Building Code of India Part IV-2016 and clause 9.3.3 of UBBL-2016.
- 17. Standby Power Supply:** Emergency lighting, exit signs, staircase and corridor lighting circuit, lift, fire pumps smoke extraction system and pressurization shall be powered from an additional source of power supply like generator and shall be automatic in action. The emergency lighting system shall be capable of continuous operation for a minimum duration of 1hour and 30 minutes. The emergency lighting shall be provided to be put on within 5 second of the failure of the normal lighting supply.
- 18. Refuge Area:** Not applicable.
- 19. Fire Control Room :** As proposed on the building plans a Fire Control Room shall be established at the entrance floor of the building with communication system (suitable public address system) to all floors and facilities for receiving the message from different floors. Details of all floor plans along with the details of fire fighting equipment and installations shall be maintained in the fire control room in digital form also. The fire control room shall also have facilities to detect the fire on any floor through indicator board connections, fire detection and alarm systems on all floors. The fire staff in-charge of the fire control room shall be responsible for the maintenance of the various services and fire fighting equipment and installations in co-ordination with security, electrical and civil staff of the building in accordance with the provisions contained in clause 9.3.10 of UBBL – 2016.
- 20. Special Fire Protection Systems for Protection of Special Risk:** The electric sub-station, 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 02 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. Special protection systems as applicable shall be provided as per clause 5.1.4, 5.1.5 & 5.1.6 of NBC-IV-2016.
 - The electrical 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.

- c. Water mains, telephone lines, intercom lines, gas pipes or any other service line shall not be laid in the duct for electrical cables; use of bus ducts/ solid rising mains instead of cables is preferred.
- d. Separate circuit for fire fighting 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.
- e. The inspection panel doors and any other opening in the shafts shall be provided with air tight doors having fire resistance of not less than 2hrs. The electric installations shall be as per BIS 1646.
- f. Nothing in contravention of the notification No. CEI/1/9/2020/263-294 dated 03.05.2021, issued by Central Electricity Authority as modified up-to date.

The Open set back area is not checked as it shall be checked by concerned building sanctioning authority. The approval of building plans shall be valid only for the proposed occupancy / layout of the floors, shown on the plans and any subdivision of the floors and change of trade/use shall only be done with the prior approval of this department. It shall be ensured that provisions of all requisite life and fire safety measures stipulated in National Building Code of India Part-IV-2005 and 2016 shall be complied in letter and spirit before the occupancy of the building under intimation to this department. This shall not be treated as FSC/NOC from fire department.

Yours faithfully,

(ATUL GARG)
DIRECTOR

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