Delhi Fire Service

Frequently asked questions

Que-1. will it be necessary to obtain NOC from Delhi Fire Service prior to construct a building?

Ans-1. Yes, the buildings which are covered under rule 27 of Delhi Fire Service Rules 2010 and Bye-Law 2.8 of UBBL 2016 are required to obtain NOC/ fire safety guidelines/ recommendations from Delhi Fire Service. The fire safety guidelines/ recommendations clearly specify as to what type of fire and life safety systems are to be installed in the building.

Que-2. Which buildings are covered under rule 27 of Delhi Fire Service Rules 2010.

Ans-2. The list is as under;

- (1) Residential buildings (other than hotels and guest houses) having height more than 15 meters or having ground plus four upper stories including mezzanine floor.
- (2) Hotels and guest houses having height more than 12 meters having ground plus three upper stories including mezzanine floor.
- (3) Educational buildings having height more than 9 meters or having ground plus two upper stories including mezzanine floor.
- (4) Institutional buildings having height more than 9 meters or having ground plus two upper stories including mezzanine floor.
- (5) All Assembly buildings.
- (6) Business buildings having height more than 15 meters or having ground plus four upper stories including mezzanine floor.
- (7) Mercantile buildings having height more than 9 meters or having ground plus two upper stories including mezzanine floor.
- (8) Industrial buildings having covered area on all floors more than 250 square meters.
- (9) Storage buildings having covered area on all floors more than 250 square meters.
- (10) All Hazardous buildings having covered area on all floors more than 100 square meters.
- (11) Underground Structures.

Que-3. At How many stages NOC from Delhi Fire Service is required to be obtained.

Ans: For the buildings specified under Rule 27 of DFS Rules 2010, NOC is required at two stages.

- a) The first stage is prior to construction of building wherein building plans are approved and fire safety recommendations are issued.
- b) The second stage is after the construction of building before commencing of occupancy, when all the recommended fire and life safety measures have been

provided/installed. These shall be verified and Fire Safety Certificate (FSC) shall be issued.

Que -4. What is the procedure for submission of building plans and what are the documents required to be submitted along with building plans?

Ans: Normally the buildings plans are required to be submitted through /referred from the concerned building sanctioning authority i.e. concerned Municipal Corporation of Delhi, DDA, NDMC, Delhi Cantonment Board, DUSIB etc. However if the layout plan is approved by the concerned civic agency than the building plans can be directly submitted under simplified procedure as per clause 3.1.3 of UBBL 2016.

The documents required are as per clause 2.8 of UBBL 2016 i.e. Smoke ventilation arrangement plans along with calculations, Automatic Sprinkler system arrangement plans along with hydraulic calculations and fire & life safety measures as covered under rule 33 of Delhi Fire Service Rules 2010. These shall be as per NBC part 4(fire and life safety) /clause 9.3.9 of UBBL 2016.

Que-5 what is the validity of the NOC/ fire safety recommendations issued / building plan approved?

Ans-5 The fire safety recommendations once issued are valid till there is no addition/ alteration or revision in approved plan.

Que-6 What is the validity of Fire Safety Certificate (FSC) issued by Delhi Fire Service.

Ans-6 The Fire Safety Certificate issued under **rule 35** unless sooner cancelled shall be valid for a period 5 years for residential buildings (other than hotels) and 3 years for non-residential buildings including hotels from the date of issue. Que-7 Whether the FSC issued once is valid forever?

Ans-7 No, the FSC's are to be renewed after a period of 5 years for residential buildings (other than hotels) and 3 years for non-residential buildings including hotels from the date of issue. At least six months prior to the expiry of FSC, application for renewal of Fire Safety Certificate shall be made to the Director in **Form 'I'** as mentioned in First Schedule of DFS Rules 2010 along with a copy of the Fire Safety Certificate.

Que-8 Who will install and maintain the fire safety systems?

Ans-8 The onus lies on the owner/ occupier of the building. Delhi Fire Service does not authorize any person/ vendor for the said purpose.

Que-9 What if, the fire safety systems are non functional?

Ans-9 Any loss due to non functional fire safety systems shall be borne by the owner/occupier of the premises including the legal proceedings.

Que-10 How many staircases are required to be provided in the building.

Ans: 10 The number of staircases normally depends upon the requirement of the travel distance and further this shall be ensured by the provisions of Bye law 7.10.

Que-11 Is there any restriction on the maximum height of the building? Ans-11 The maximum height of the building is restricted as per the provisions of Development control norms of Master Plan of Delhi-2021 and the notifications

2016).

Que-12 what is the minimum required width of the road on which building shall abut?

issued by the Government from time to time (please see Annexure-VI of UBBL-

Ans-12 The minimum required width of the abutting road is as per bye-law 8.2 of UBBL-2016.

Que-13 what details are required to be provided on the building plans? Ans-13 The building plans shall be prepared as per bye-law 2.6 UBBL 2016 and must contain the information mentioned under bye-law 2.7 & 2.8.

Que-14 What about the design and installation of Automatic Sprinkler System? Ans-14 The design and installation of the Automatic Sprinkler System shall be as per the specifications contained in IS 15105 published by Bureau of Indian Standards. Sprinkler design plans and calculation shall be provided along-with building plans.

Que-15 What about the installation of the smoke management systems? Ans-15 The smoke management systems shall be fully ducted and air changes requirement shall be as per National Building Code of India/ International codes. The fresh air supply shall be discharged at ground level and the exhaust shall be taken out from ceiling level. Smoke management plans and calculation shall be provided along-with building plans.

Que-16 Whether the model of the building is required or not? Ans-16 If the height of the proposed building is more than 15 meters than model of the building is required. The 3 D model of same can be provided online.

Que-17 What are the requirement of refuge area in the building? Ans-17 For buildings more than 24 meters in height, the refuge area as per byelaw 9.3.6 of UBBL-2016 is required to be provided.

Que-18 is helipad required on the terrace of the high rise building? Ans- Helipad is required to be provided on the terrace of those buildings which have height more than 200 meters as per bye-law 8.6 of UBBL-2016.

Que-19 what is the rate of replenishment of water is required for the fire water tanks?

Ans-19 The rate of replenishment shall be 1000 liter per Minute.

Que-20 Can other fire safety arrangements such as water mist, gas based systems can be used?

Ans-20 As per the requirement of the built in environment above systems can be used but the fire safety systems recommended at the time of approval of building plans cannot be compromised.

Que-21 Whether international Codes of Practices are accepted?

Ans-21 International Codes of practices normally not considered however if Indian codes are not explicit with reference to the built in environment than whole scheme of the fire safety systems shall be prepared as per the said International Codes of practice. The whole design scheme/project report along with a copy of code shall be provided with plans.

Que-22 What is the capacity of the pumps to be installed in the fire pump house? Ans-22 The capacity of the pumps shall be determined by the actual discharge requirements as per IS 15105/ NBC part 4. The higher value shall be considered.

Que-23 Is it mandatory for all the basement to have automatic sprinkler system? Ans-23 The basement having area more than 200 SQM shall be required to provide automatic sprinkler system.

Que-24 From where the fire extinguishers can be purchased?

Ans-24 Delhi Fire Service does not authorise any person/ vendor for the sale / purchase of any fire and life safety systems. The systems should be as per BIS standards and can be procured from anywhere.

Que-25 what is the code of practice followed by Delhi Fire Service?

Ans-25 Delhi Fire Service follows UBBL-2016/ National Building Code of India 2016.

Que-26 What are the parameters of the building based upon which the fire safety guidelines are issued?

Ans-26 The basic parameters are the type of occupancy as per bye-law 1.4.75 of UBBL-2016, height of the building and the floor area of the building.

Que-27 How various industrial occupancies are classified in to different degree of hazard.

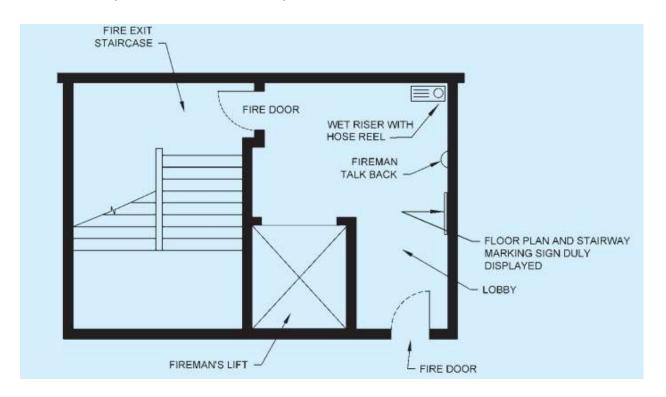
Ans-27 The classification of various industrial occupancies are as per Annexure 'B' of NBC part IV.

Que-28 what are the low hazard industrial occupancies? Ans-28 the list is as under:

Abrasive manufacturing premises, Aerated water factories. Agarbatti manufacturing premises, Analytical and/or Q.C. Laboratories, Arecanut slicing and/or Betelnut factories, Asbestos steam packing and lagging manufacturers, Battery charging and service stations, Battery manufacturing, Breweries, Brickwork, Canning factories, Cardamom factories, Cement factories and/or asbestos or concrete products, manufacturing premises, Ceramic factories, crockery, stoneware, pipe manufacturing, Clay works, Clock and watch manufacturing, Clubs, Coffee curing, roasting and grinding factories, Condensed milk factories, milk pasturising plants and dairies, Confectionery manufacturing, Electric lamps (incandescent and fluorescent) and T.V. tube manufacturing, Electroplating works, Engineering workshops, Fruits and vegetables dehydrating and drying factories, Fruits products and condiment factories, Glass and glass fibre manufacturing, Godowns and warehouses (non-combustible goods), Gold thread/gilding factories, Gum and/or glue and gelatine manufacturing, Ice candy and ice-cream and ice factories, lnk (excluding printing ink) factories, Mica products manufacturing.

Que-29 what is fire tower/ fire fighting shaft and how many fire towers are required to be provided?

Ans-29 fire tower / fire fighting shaft is an enclosed staircase having provision of fireman's lift, wet riser with hose reel and a talk back system. For further details please refer clause No. 1.4.46 & 9.3.13 (amended) of UBBL 2016 and clause 2.24 of NBC part 4, 2016. 50% of requisite staircases shall be fire towers.



Que-30 what is segregation/ separation of staircases?

Ans-30 The staircase serving to the basement need to be designed in such a manner that at ground level, entry to basement shall be through a separate door and for upper floors through another door. Smoke rising from the basement shall not fill in the staircase enclosure.

Que-31 what is compartmentation?

Ans-31 Compartmentation is a process of dividing the large floor plates in to smaller areas such that the fire/ smoke shall remain confined to the area where the fire incident occurred. It includes horizontal as well as vertical sealing. Providing of fire check doors, dividing the area in to zones by fire curtain, water curtain etc. and sealing of shafts are some methods to achieve compartmentation. Refer clause 4.5 of NBC part 4, 2016 for further details.

Que-32 what is refuge area/ fire check floor? where it shall be provided?

Ans-32 A location in a building designed to hold occupants during a fire or other emergency, when evacuation may not be safe or possible. Occupants can wait there until rescued or relieved by firefighters. Every building having height more than 24 m required to provide refuge area as per clause 9.3.6/ 9.3.7 of UBBL 2016. Further fire check floor is required to be provided in the buildings having height more than 70 m as per the provisions contained in clause 9.3.8 of UBBL 2016.

Que-33 which buildings should have fire control room?

Ans-33 Fire control room shall be provided in all buildings having height of 15 m and above and group housing with a height of 30 m and above as per clause 9.3.10 of UBBL 2016.

Que-34 What is width of fire tender movement road?

Ans-34 As per clause 8.2 of UBBL 2016, a hard surface road having 6.0 m width (with 9.0 m turning circle at the corners) for building upto 40.0 m in height and 9.0 m width (with 12.0 m turning circle at the corners) in case of buildings more than 40.0 m in height shall be provided.

Que-35 What details are required to be shown on the plans?

Ans-35 Following plans/ documents are required for obtaining fire clearance:

- Architectural plans drawn on scale as mentioned in clause 2.6 of UBBL 2016, having marked Fire Control Room, Fire Pump House with direct access, Fire Water tanks, ladders, yard hydrants, ventilation cut outs, Fire shafts etc.
- 2. Sprinkler design calculation, schematic layout and plans
- 3. Smoke Control calculations, Schematic lay outs and plans
- 4. Duly filled CAF

For submitting online building plan click here

http://deptewb.mcd.gov.in:18080/mcd_townplanningweb/RegistrationgetBlankPage.action?loginType=CITIZEN

Delhi Fire Service can be viewed on www.dfs.delhigovt.nic.in