

Designing, Supply, Errection, Testing & Commissioning of Fire Hydrant,
Sprinkler, Detection & Alarm System.



**ATHARVA
ENTERPRISES**

Enquiry : panil287@gmail.com
fireandsafety247@gmail.com
Mob.: 7788239008, 9130008101
Tel. : 0253 - 2312808

Off. Add.: Sumangal Plaza, Opp. Tibetan Market, Bh. HDFC House,
Sharanpur - Trimbak Link Road, Nashik - 422 005.

Reg. Add.: 7, Shriharikunj, Next to Trikonl Garden, Kathe Nagar, Dwarka, Nashik - 11U

FORM B

[See section3 (3) and rule4 (2)]

CERTIFICATE

Certified that I / We have carried out inspection of the Fire Prevention and Life Safety Measures installed in the following building or premises, namely :-

**Gems English Medium School,
Hirawadi, Panchwati,
Nashik.**

I / We further certify that these installations in the above mentioned buildings are maintained in good repair and efficient conditions during the period Jan 2019 to June 2019, as required under the provisions of the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 (Mah. III of 2007). The details of the inspection of installations carried out by me/us are mentioned in the report appended herewith.



Abhi

Place: Nashik

Signature and Address of the Licensed Agency

License No. : MFS-LA/RF-0335

License No. : MFS-LA/RD-0328

Annexure -I

List of material installed at **Gems English Medium School**

| SR.NO. | EQUIPMENT | REMARK |
|--------|--------------------------|-----------|
| 1 | Main Pump | Installed |
| 2 | Jockey Pump | Installed |
| 3 | Standby Pump | Installed |
| 4 | Riser / Down comer | Installed |
| 5 | Court yard hydrant | Installed |
| 6 | Hydrant valve | Installed |
| 7 | Hose Box | Installed |
| 8 | Hose pipe | Installed |
| 9 | Branch pipe | Installed |
| 10 | Hose reel with nozzle | Installed |
| 11 | 4 Way Fire Brigade Inlet | Installed |
| 12 | Manual Call Point | Installed |
| 13 | Hooter | Installed |
| 14 | Manual Call Point | Installed |
| 15 | Fire Extinguisher | Installed |

Thanking You

For Atharva Enterprises

Authorized Signatory

License No. MFS-LA/RF-0335

License No. MFS-LA/RD-0328



- Note:- i) Architects & Owner/builder are requested to read Following Requirements / terms and conditions carefully.
 ii) If any of the Following requirements are not fulfilled or completed during construction, Final NOC from this department will not be issued.
 iii) The License Agency who will install the fire Protection system will be responsible for servicing & maintenance of the system and to issue the 'Form B' certificate in January and July month of every year for next Five years.

NASHIK MUNICIPAL CORPORATION
FIRE & EMERGENCY SERVICE DEPARTMENT

Office of the Chief Fire Officer
 NMC / FIRE / WS / II / Edu- 01 / 2015
 DATE: 26 / 06 / 2015

To,
 Miss Gayatri Balasaheb Aher
 C/o Shri Sanjay Dhumne, Architect

Sub: Requirements under Maharashtra Fire Prevention & Life safety Measures Act, 2006 for construction of Educational (School) Building, in P.No. 08, S. No.211 / 2 + 212 / 4 / 1B, Hirawadi, Panchvati, Nashik.

Ref:

1. Commencement certificate from Town Planning Deptt, NMC, wide no. LND/ BP/ Panch/C-1 / 746; dated 01 / 10 / 2010
2. Fire Prevention Fund Rs. 93,177/- (Fire Fund Rs. 86,275/- + Inspection Fee Rs. 6,902/- Paid wide Book No. 0828; Pass No. 020; dated 26 / 06 / 2015
3. Decision by Hon. Supreme Court of India in Writ Petition (Civil) No. 438 of 2004; dated 13/04/2009

Miss Gayatri Balasaheb Aher, Nashik, has decided to construct a Educational (School) Building, in P.No. 08, S. No.211 / 2 + 212 / 4 / 1B, Nashik submitted municipal drawings after scrutiny from Town Planning deptt. to this office through Shri Sanjay Dhumne, Architect

The details of the building are as follows,
 The building abuts on 18.00 meter wide road.

BUILDING DETAILS

Area of construction (Built up area of Building): 2064.45 sq. mtr + stilt + staircase etc
 Height of Building: meters
 Type of occupancy: Educational (School)
 Number of floors: Ground + 2 floors
 No. of staircases required: As per DC Rule No.17.3.4 (Min. 2 nos)

SPECIAL REQUIREMENTS:-

As the proposed building is a Special buildings as specified in D.C. Rule No. 6.2.6.1, and the building is high rise Educational building, Fire protection rules and regulations as specified in National Building code of India-2005- Part IV, (Fire and Life Safety) and Maharashtra Fire Prevention & Life safety Measures Act, 2006 become applicable as below,

1. ACCESS & TURNING CIRCLE FOR FIRE BRIGADE APPLIANCES:
 - 1.1 All entrances & exit gates for the complex shall be min. of 4.5-meter width and height.
 - 1.2 Courtyard of the complex shall be capable of taking the weight of Fire Appliances weighing nearly 45 tones.
 - 1.3 As a School building, open spaces on its all side shall be of 6.00 meter width (Minimum 6.00 meter width) and shall be kept free of obstructions and shall be motorable for movement of fire appliances. No parking is permissible in that area.
 - 1.4 Balconies / Porches / Garages which will reduce the side marginal distance less than 6.00 mtrs will not be allowed.

A. K. Mishra

Dr. A.K.MISHRA
 Principal
 K.V.No.1,
 Dehu Road, Pune.

K. V. Naik

टी. कलाधीनाथन
 प्रधानाचार्य
 परमाणु ऊर्जा केंद्रीय विद्यालय नंबर-3
 अणुविकास कॉलेजी, ए-टी. ए. पी. पी
 कस्तूरबा जिला- पालघर, पंजाब, 401504



2. STAIRCASES:

- 2.1 The maximum travel distance should be as per NBC Rule (Max. 30.0 Meter)
- 2.2 Width of any staircase or exit shall not be less than 2.00 mtrs.
- 2.3 Minimum two staircases per wing are necessary As per DC Rule & NBC-2005 Part-IV clause no 4.6.2 out of which one shall be on the external wall of the building and one shall be in the form of FIRE-TOWER i.e. enclosed type staircase. No. of staircases provided are sufficient considering the Travel Distances.
- 2.4 Permanent ventilation at the top of staircase shaft shall be provided and is shall be not less than 5 % of the cross sectional area of the staircase.
- 2.5 Gas pipeline, Air condition ducts, Electrical Ducts etc shall not be passed through staircase enclosure.
- 2.6 Staircase on external walls of the buildings shall directly open to exterior or interior open space or to an open space of safety.
- 2.7 The staircases shall be lighted and ventilated and the minimum size of opening on walls abutting to open space shall be minimum 0.5 sq. meters per landing.
- 2.8 No living space, store or other Fire risk shall open directly into the staircase.
- 2.9 Minimum headroom under the landing of the staircase shall be 2.2 Mt.
- 2.10 Access to staircase shall be through a fire / smoke door of minimum 2 hours Fire Resistance rating.
- 2.11 No combustible material shall be used for deduction / wall paneling in staircase.

3. ESCAPE ROUTES (CORRIDOR & LOBBIES):

- 3.1 The corridors and lobbies on each floor landings shall be ventilated directly to open air.
- 3.2 Smoke stop doors in adequate quantity shall be provided across the corridors considering the travel distances.
- 3.3 All exits and escape routes shall be free from obstructions. No flammable material shall be stored in corridors, lobbies or staircase landings.
- 3.4 Lifts and escalators shall not be considered as escape routes or exits.

4. DOORS:

- 4.1 All doorways shall open outwards, away from room but shall not obstruct the travel passage along any exit.
- 4.2 If numbers of student in a class exceeds 45, there shall be two doors to the class-room.

5. SERVICE DUCT / SHAFT:

- 5.1 Service Ducts and shaft shall be enclosed by walls of 2 Hours and doors of 1 Hours Fire resistance rating.
- 5.2 All such ducts / shafts shall be properly sealed and fire stopped at all floor levels.
- 5.3 A vent opening at the top of the service shaft shall be provided having area between one fourth and one half of the area of the shaft.

6. ELECTRICAL SERVICES:

- 6.1 The electric distribution cables / wiring shall be laid in separate duct. The duct must be sealed at every floor with non-combustible material having the same fire resistance rating as that of the duct.
- 6.2 Medium and low voltage wiring running in shaft & false ceiling shall run in separate conduits.
- 6.3 Water mains, telephone lines, gas pipes or any other service lines shall not be laid in the duct for electrical cables.
- 6.4 Separate circuits for fire fighting pumps, lifts, staircase and corridors 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 one circuit will not affect the other.
- 6.5 Suitable circuit breakers shall be provided at appropriate points.
- 6.6 No other storage except electrical meters and panel board shall be allowed in electric control room.

7. ILLUMINATION OF MEANS OF ESCAPE:

- 7.1 The staircase and corridors lighting shall be on separate circuits and shall be independently connected so as it could be operated by one switch installation on ground floor easily accessible to Fire Fighting staff at any time, irrespective of the position of the individual

Handwritten signature

टी. कल्याणीनाथन
प्रधानाचार्य
परमाणु ऊर्जा विभाग, दिल्ली-110016
अनुसंधान एवं विकास विभाग
एच.ए.सी. बिल्डिंग, प्लॉट नं. 3
एच.ए.सी. बिल्डिंग, प्लॉट नं. 3
504

control of the light points if any. It should be of miniature circuit breaker type of switch so as to avoid replacement of fuse in case of crises.

- 7.2 Staircase and corridors lighting shall also be connected to alternate supply.
 7.3 Emergency lights shall be provided in the staircase and corridor.
 7.4 All wires and other accessories used for emergency light shall have fire retardant property.

8. ALTERNATE SOURCE OF POWER SUPPLY (Compulsory): (NBC 2005-Part IV, clause C-1.15)

A stand by electric generator of sufficient capacity shall be installed to supply power to staircase and corridor lighting circuits, fire lift, the stand by fire pump, pressurization fans & blowers smoke extraction and damper system in case of failure of electric supply.

9. LIGHTNING PROTECTION OF BUILDING:

The lightning protection for building shall be provided as given in Part - 8 Building Services section - 2 Electrical Installation of NB Code. 2005.

10. FIRE PROTECTION SYSTEM:

As per National Building code-2005, Part-IV & Maharashtra Fire Prevention & Life safety Measures Act, 2006 the following fire protection system will have to be installed for the safety of the building.

10.1 Requirement & Provision:-

Fire fighting and fire protection system as given on next page shall be installed in the building.

Fire Protection Required

| Sr. No | Protection | Requirements | Provision | Remarks |
|--------|---|--|------------------------------|--------------------------------------|
| 1. | Portable Fire Extinguishers | Required | IS: 2190 | On each floor & in Lift machine room |
| 2. | Hose Reel | Required | IS: 884 : 1985 | On each floor |
| 3. | Down Comer | Required | | |
| 4. | Yard Hydrant | Required | IS:3844:1989 & IS 13039:1991 | |
| 5. | Automatic Fire Detection & Alarm system. | Required | IS:2189: 1999 | only MOEFA system |
| 6. | Underground Static Water Storage Tank | Required 50,000lirs | | Separate for Fire Fighting |
| 7. | Terrace tank | Required 10,000 ltrs | | Dedicated for Fire Fighting |
| 8. | Fire Pump | 1620 LPM- 1 no. electric driven 1620 LPM- 1no. diesel driven 180 LPM - 1no. electric driven. | | 1620 lpm @70mtr. Head |
| 9. | Fire Brigade Connection for static water tank & for hydrant system. | Required (4-WAY) | Near main entry gate. | At ground floor, @ 1.0 mtr above GL |

Dr. A.K. Mishra
Dr. A.K. MISHRA
 Principal
 K.V.No.1,
 Dehu Road, Pune.

10.2 Approval of Drawings of Fire Protection System:

Detailed drawings of Hydrant system, detection system & sprinkler system etc will be submitted for the approval of Fire Brigade department before starting of actual work

11.

FIRE DRILLS & FIRE ORDERS (Including EMERGENCY EVACUATION PLAN)

Fire notices / orders shall be prepared to fulfill the requirements of fire fighting and evacuation from the building in event of Fire and other emergency. The occupants shall be made thoroughly conversant with their actions in the event of emergency by displaying fire noticed

टी. कलाधीनाथन
 प्रधानाचार्य
 परमाणु ऊर्जा संशोधन विद्यालय नंदा - 3
 अनुविभागाध्यक्ष, को-टो-पी
 तालिका/जिल्हा-पुणे, पो. 401504

at vantage points and also through regular training. Such notices should be displayed prominently in broad lettering.
Emergency evacuation and disaster management plan shall be prepared and followed strictly.

12. FIRE CONTROL ROOM:

There shall be a control room on 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 fire control room. The fire control room shall also have facilities to detect the fire on any floor through indicator boards connection; fire detection and alarm system on all floors.

The maintenance of the various services and fire fighting equipments and installations in co-ordination with security, electrical and civil staff of the building shall be done periodically as per norms.

13. GENERAL CONDITIONS:

- 13.1 No flammable / explosive material shall be stored in the premises before prior permission from the concern department including Fire Brigade.
- 13.2 All fire fighting equipments shall be as per IS specifications bearing I.S.I. mark
- 13.3 Fire fighting systems shall be painted with PO red color.
- 13.4 Sign board such as 'No Smoking', 'Exit', 'Emergency Exit', 'Emergency Phone Nos.', 'First Aid Box', Fire orders/ drill instructions etc shall be provided at prominent places. They shall be painted in Marathi, Hindi and English with reflective / glow paint only.
- 13.5 Floor Nos. shall be clearly demarked on every floor in staircase lobby and in lift well.
- 13.6 Fire protection work will be carried out by Licensed Agency holding License as per provision in Maharashtra Fire Prevention & Life safety Measures Act, 2006 .
- 13.7 While providing all fire and life safety provisions, the National Building code of India 2005- Part IV & Maharashtra Fire Prevention & Life safety Measures Act, 2006 will be strictly followed.
- 13.8 The undersigned reserves right to amend any additional recommendations deemed fit during final inspection due to statutory provisions amended from time to time and in the interest of the protection of life & property

Note: a) The Fire Brigade officials will not be responsible for violation, if any, of D.C.Rules and or NBC -Part-IV Rules.
b) The License Agency who will install the fire Protection system will be responsible for servicing & maintenance of the system and to issue the 'Form B' certificate -

[Handwritten Signature]
टी. कलानी प्रधान
प्र.प.
परमाणु ऊर्जा केंद्र
अनुविकास केंद्र
नाशिक/जिला-फारुख, महाराष्ट्र.

Copy to:
Executive Engineer (Town Planning Dept)
Nashik Municipal Corporation.

3 Please issue the commencement certificate after fulfilling the above requirements in view of Fire & Life safety.

[Handwritten Signature]
CHIEF FIRE OFFICER,
Nashik Municipal Corporation.



[Handwritten Signature]
CHIEF FIRE OFFICER,
Nashik Municipal Corporation.