

## GOVERNMENT OF MAHARASHTRA

No. MFS/100/2022  
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Directorate of Maharashtra Fire Service  
Maharashtra Fire Service Academy  
Vidyanagri, Hans Bhugra Marg,  
Santacruz (East), Mumbai – 400 098  
Date: 29/07/2022

To,

M/s. Pandurang Bhavanishankar Pandit  
Survey No. 43/1B, at Karanje Tarf Satara,  
Dist. Satara.

**Sub.: NOC stipulating fire protection and firefighting requirements for your proposed construction of Educational Building on Survey No. 43/1B, at Karanje Tarf Satara, Dist. Satara.**

**Ref.: Your application No. Asst. Director/Satara/65/2022 Dtd. 29/06/2022**

This is a proposal for construction of Educational Building having Ground Floor + Two upper floors with the total height of 11.40 Mtrs. from general ground level.

Total Plot area is 7,600.00 Sq. Mtrs. and proposed built up area is 6,330.80 Sq. Mtrs. (Excl. area free of FSI). The detail of the proposed Construction as per architects' area statement is as under,

**Educational Building:**

Sr. No.	Name of the area	Proposed FSI Area
1.	Ground Floor	2125.99
2.	First Floor	2237.93
3.	Second Floor	1966.88
	Total B/Up area	6330.80

- **The Occupant Load in above buildings should not exceed in any case as prescribed in Table-3 of National Building Code 2016, Part IV.**

**This NOC is valid subject to fulfillment of following condition:**

**Provisions of Maharashtra Fire Prevention and Life Safety Measures Act, 2006:**

- Under Section 3 of "Maharashtra Fire Prevention and Life Safety Measures Act, 2006" (hereinafter referred to as "said Act").** The applicant (developer, owner, occupier by whatever name called) shall comply with all the Fire and Life Safety measures adhering to National Building Code of India, 2016 and as amended from time to time failing which it shall be treated as a violation of the said Act.
- As per the provision as under: - 10 of the said Act.** No person other than the License Agency shall carry out the work of providing Fire Prevention and Life Safety Measures or performing such other related activities required to be carried out in any place or building or part thereof provided that,
  - If the Director, MFS is satisfied that, for any reason, to be recorded in writing, the owner or occupier is not able to carry out the fire prevention and fire safety measures in any such place or building or part thereof through a Licensed Agency, he may authorize any person or persons he thinks fit to carry out such work, and any work carried out by such authorized person or persons shall be deemed to be carried out by a Licensed Agency.**
  - No Licensed Agency or any other person claiming to be such Licensed Agency shall give a certificate under sub-section (3) of section 3 regarding the compliance of the fire prevention and life safety measures or maintenance thereof in good repair and efficient condition, without there being actual such compliance or maintenance. The names of the License Agencies approved by Directorate of Maharashtra is available on our website [www.mahafireservice.gov.in](http://www.mahafireservice.gov.in)**

3. Though certain conditions are stipulated from the said Act and the National Building Code of India, it is obligatory on part of the applicant that is developer, builder, occupier, owner, tenant, by what so ever named called to abide with the provisions of the said Act failing which it shall be actionable under the provisions of said act.
4. The plans of the building should be approved by The Concern Competent Authority.
5. The Occupancy certificate should be obtained from The Competent Authority. The O.C. shall be issued subject to "Final No-Objection Certificate" from this Department.
6. Proper roads in the premises should be provided & marked on ground for easy mobility of the Fire Brigade Appliance as per the guidelines given in NBC-2016, should be kept free from obstructions all the time. The load bearing capacity of internal roads must be minimum 45Tones. The width of the road shall not be less than 6.0 Mtrs for easy maneuver of the fire engine. However, the marginal open space shall be seen in to by the concern competent authority of the building proposal department.
7. Inspection of Fire Fighting installation will be carryout by the representative of this Fire department during installation of the Firefighting system.
8. All portable firefighting equipment installed at various locations as per local hazard such as CO<sub>2</sub>-DCP, Foam, Fire buckets should be strictly conforming to relevant IS specification. All the firefighting equipment's shall be well maintained and should be easily accessible in case of emergency. The monitoring mechanism for all Fire Fighting equipment should be designed and implemented. The Guidelines should be followed based on IS 15683 & IS:2190 – Code of Practice for selection, Installation and Maintenance of Portable First-Aid Fire Extinguishers.
9. All the firefighting equipment shall be well maintained and should be easily accessible in case of emergency.
10. Emergency Telephone numbers like "Police", "Fire Brigade", "Hospital", "Doctors", and "Responsible persons of the company" should be displayed in security cabin & production building.
11. It shall be ensured that security staff & every employee of the co. are trained in handling firefighting equipment & fire fighting.
12. "Fire Extinguisher", "Fire Bucket" "Danger" "No Smoking" caution boards should be displayed at the places physically shown & the caution boards should be easily visible and as per the guidelines given in IS:9457, IS:12349 and IS:12407.
13. The house keeping shall be well maintained within the entire premises.
14. All electrical appliances/fittings and fixtures should be strictly flame proof.
15. The Fire Exit Drill or Evacuation Drill should be plan and instruction should be given to the staff minimum four times in a year and drill should be carried out twice in a year.
16. "On-Site" & "Off-Site" emergency plan/Evacuation Plan shall be prepared & mock drills shall be conducted twice a year & instructions to every employee shall be given once in three months.
17. In future if the developer intends to go for expansion, alteration, modification of any building an approval of fire department must be obtained before commencing proposed construction.
18. Stability certificate to all buildings shall be obtained from Architect or competent person as per the Rule 3-A of Maharashtra Factories Rules, 1963.
19. The height & other clearances / approvals must be obtained from local "Civil Aviation Department, if necessary".
20. **All necessary approvals required from Government / Planning / Special Planning Authority shall be obtained, as applicable.**
  - **Requirement and Provision:** The following Fire Protection System is required for the fire safety of the building (As per requirement of Table 7 of Part 4)

Sr. No.	Fire Fighting Installation	Requirements	Provision	Remarks
1.	Portable Fire Extinguishers	Required	IS: 15683 & 2190.	Portable Fire Extinguisher should be installed conforming to IS 15683 & other I.S. codes
2.	Hose Reel	Required at prominent places.	At Various strategic Locations.	On each floor in the Staircase landing for Fire Fighting. The first aid hose reel shall be connected directly to riser/down comer main and diameter of the hose reel shall not be less than 19mm confirming to IS 884:1985
3.	Terrace Level Tank (RCC)	Required 10,000 Ltrs.		For wet riser cum down comer. On each terrace of building if applicable.
4.	Fire Pump	1 No. 450 lpm electrical driven booster pump at terrace level		Fire Fighting pumps shall be well maintained. All the fire pumps must be centrifugal pumps only
5.	Sign Indicators for all fire safety, safe evacuation of occupants in case of emergency signs	Required at Prominent Places in all buildings.		Sign indicators should provided at prominent places as per the guidelines given in IS:9457 for Safety colour and Safety IS:12349 for Fire Protection Safety Signs IS: 12407 for Graphics symbols for Fire Protection Plan.

Note: Fixed firefighting installations such as risers, hydrant connections, hose reels etc. shall be provided in separate shaft having opening at floor level with Glass cabinet having locking arrangement to avoid theft and damage.

#### Exit Requirement for Conference Room, Classrooms:

1. Door width for Conference Room shall not be less than 2 Mtrs.
2. Clear aisles not less than 1.2 Mtrs. in width shall be formed at right angles to the line of seating in such number and manner that no seat shall be more than seats away from an aisle.
3. Rows of seats opening on to an aisle at one end only shall have not more than seven seats. Under the conditions, where all these aisles do not directly meet the exit door, cross-aisles shall be provided parallel to the line of seating so as to provide direct access to exit, provided not less than one cross aisles for every 10 rows shall be required. The width of cross aisles shall be of minimum 1 Mtrs. 8 steps shall not be placed in aisles to overcome differences in levels unless the gradient exceeds 1:10.
4. Rows of seats between aisles shall have not more than 14 seats.
5. The spacing of rows of seats from back-to-back shall be neither less than 850 mm nor less than 700 mm plus the sum of the thickness of the back and inclination of the back. There shall be a space of not less than 350mm between the back of one seat and the front of the seat immediately behind it is measured between plumb lines.

#### Guidelines for School Buildings:

1. The Urban Development Department Govt. of Maharashtra had issued guidelines for Safety of Educational Buildings vide letter No. FFS-2004/419/CR-121/UD-6, Dt. 05/08/04 & Circular issued by School Education Department, Govt. of Maharashtra vide No. 2004/ (155/04)/Training-4, Dt. 22/07/04 which shall be scrupulously followed.
2. Building intended for educational occupancy shall not be used for any hazardous occupancy.

3. Storage of Volatile Flammable Liquids shall be prohibited and handling of such liquids shall be restricted to Science Laboratories only.
4. Exits and other means of Escape like Corridor & Staircase shall be kept free from any kind of Obstruction & Combustible Materials such as Benches, Chairs etc. Combustible materials like Old Newspaper, Wooden Furniture's, Gunny Bags etc., shall not be kept store on the Lofts.
5. Exits should be clearly visible and the route to reach the exits shall be clearly marked sign posted to guide the students (occupants) of the floor concerned.
6. Exits shall be so arranged that at least two separate exits are available in every floor area. Exits shall be as remote from each other as practicable and so arranged that there are no pockets or dead ends.
7. During Annual Function or any programmers where temporary structure i.e. Pandal or Shamiyana is erected, proper approval from Fire Department is to be taken. All necessary guidelines issued by Fire Department shall be scrupulously followed.
8. Every room or class room with a capacity of more than 45 persons in area shall have at least two doorways for exit of not less than 900 mm wide.

#### Other Requirements:

1. Building intended for educational occupancy shall not be used for any hazardous occupancy.
2. Every room or class room with a capacity of more than 45 persons in area shall have at least two doorways for exit of not less than 900 mm wide.
3. Storage of volatile flammable liquids shall be strictly prohibited and the handling of such liquids shall be restricted to science laboratories only.

#### GUIDELINES FOR INTERNAL STAIRWAYS as per NBC 2016:

- a) Stairways shall be constructed of non-combustible materials throughout. Hollow combustible construction shall not be permitted. Width of Staircase should be 1.5 Mtrs.
- b) No Gas piping shall be laid down in the stairway.
- c) Internal staircase shall be constructed as a self-contained unit with at least one side adjacent to external walls and shall be completely enclosed.
- d) Internal staircase shall not be arranged around lift shaft unless the latter is entirely enclosed by material of fire resistance rating as that for type of construction itself.
- e) The access to main staircase shall be gained through at least half-an-hour fire-resisting automatic closing doors, placed in the enclosing walls of the staircase. They shall be swing type doors opening in the direction of the escape.
- f) No living space, store or other space, involving fire risk, shall open directly in to staircase.
- g) The external exit door of a staircase enclosure at ground level shall open directly to the open space or should be accessible without passing through any door other than a door provided to form a draught lobby.
- h) The exit signs with arrows indicating the escape routes shall be provided at a height of 1.5 m. from the floor level on the wall and shall painted with fluorescent paint. All exit signs should be flush with the wall and so designed that no mechanical damage to them can result from the removing furniture, material or any other equipment.
- i) Exits shall be so located that it will not be necessary to travel more than 30 Mtrs. from any point to reach the nearest exit along the line of travel.

#### Staircase Design requirement:

1. The minimum headroom in a passage under the landing of a staircase and under the staircases shall be 2.2 Mtrs. & Width not less than 1.5 Mtrs.
2. Access to main staircase shall be through a fire / smoke check door of a minimum 2 hours fire resistance rating.
3. No living space, store or other fire risk shall open directly in to the staircases.
4. The main and external staircases shall be continuous from ground floor to the terrace level.
5. No electrical shafts, A/c ducts or gas pipe etc. shall pass through or open in the staircases. Lifts shall not open in staircases.

**Exit Requirement:**

1. An exit may be doorway, corridor, Passageway(s) to an internal staircase, or external staircase, or to a verandah or terrace(s), which have access to the street, or to the roof of a building or a refuge area. An exit may also include a horizontal exit landing to an adjoining building at the same level.
2. Every exit, exit access or exit discharge shall be continuously maintained free of all obstructions or impediments to full use in the case of fire or other emergency.
3. Exits shall be clearly visible and the route to reach the exits shall be clearly marked and signs posted to guide the occupants of the floor concerned. Signs shall be illuminated and wired to an independent electric circuit on an alternative source of supply.
4. To prevent spread of fire and smoke, fire doors with 2 hours fire resistance shall be provided at appropriate places along the escape routes and particularly at the entrance to lift lobby and stair well where a 'funnel or flue effect' may be created inducing an upward spread of fire.
5. All exits shall provide continuous means of egress to the exterior of a building or to an exterior open space leading to the street.
6. Exits shall be so arranged that they may be reached without passing through another occupied unit.

**ELECTRICAL SERVICES:**

1. The electric distribution cables/wiring shall be laid in separate duct. The duct shall be sealed at every alternate floor with non-combustible materials having same fire resistance as that of the duct. Low & medium voltage wiring running in shaft & false ceiling shall run in separate conduits.
2. Water mains, telephone lines, intercom lines, gas pipes or any other service lines shall not be laid in the duct of electric cables, use of bus ducts / solid rising mains instead of cables shall be preferred.
3. Separate circuits for water pumps, lifts, staircase & corridor lighting 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. Such circuits shall be protected at the origin by an automatic circuit breaker with its no-volt coil removed. Master switches controlling essential service shall be clearly labeled.
4. The inspection panel doors and any other opening in the shaft shall be provided with airtight fire doors having the fire resistance of not less than one hours.
5. Medium & low voltage wiring running in shaft and within fall ceiling shall run in metal conduit. Any 230 Volt wiring for lighting or other services, above false ceiling, shall have 660 Volt grade insulation. The false ceiling including all fixtures for its suspension, shall be of non-combustible material and shall provide adequate fire resistance to the ceiling in order to prevent spread of fire across ceiling.
6. An independent & well-ventilated service room shall be provided on the ground floor with direct access from outside or from the corridor for the purpose of termination of electric supply from services & alternative supply cables. The doors provided for the service room shall have fire resistance of not less than **two hours**. If service room is located at the first basement, it should have automatic fire extinguishing system. Suitable circuit breakers shall be provided at the appropriate points.

**Access:**

Two entrance gates each of width not less than 04.50 Mtrs. and height clearance not less than 04.50 Mtrs. shall be provided.

**TERRACE DOOR:**

1. The top half portion of the doors shall be provided with louvers.
2. The latch- lock shall be installed from the terrace side at the height of not more than 1mtrs.
3. The glass front of 6-inch diameter with the breakable glass shall be provided just above the latch lock, so as to open the latch in case of an emergency by breaking the glass.

**PORTABLE FIRE EXTINGUISHERS: -**

- a) Two Dry Chemical Powder (A.B.C.) type fire extinguisher of 4 kgs. Capacity and CO<sub>2</sub> Type of Extinguisher of 4.5 kg having I.S.I. certification mark and two buckets filled with dry, clean sand shall be kept in Electric meter Room as well as Lift Machine room of each building.
- b) Adequate Nos. of Dry Chemical Powder (A.B.C.) type fire extinguishers each of 4 Kgs. Capacity having, I.S.I (15682 & 2190) certification mark shall be kept at parking area equally distributed at prominent places in stilt.

**SIGNAGES:**

Self-glowing / fluorescent EXIT signs in green color shall be provided showing the means of escape for the entire building.

In addition to the above, all provision under the National Building Code of India-2016 shall be strictly adhered, also if any change in activity or Proposed expansion or Subletting of Plot, NOC from this department is essential.

This is a "Provisional No-Objection Certificate". After compliance with above mentioned recommendations / conditions, inspection of the fire prevention & protection systems provided by you will be carried out by this department & after satisfactory performance of the system "Final No-Objection Certificate" will be issued.

The undersigned reserves right to amend any additional recommendations deemed fit during the final inspection due to the statutory provisions amended from time to time and in the interest of the protection of the company.

As per Maharashtra Fire Prevention and Life Safety Measures Act, 2006, Section 25-Annexure-Part III, M/s. Pandurang Bhavanishankar Pandit has paid Fire Protection Fund Fees amounting to Rs. 15,000/- (Rs. Fifteen Thousand Only) by NEFT vide reference No. 3QLQV3EE7813 Dated 27/07/2022. However, Town planning is requested to verify the total built up area and inform this Department for the purpose of levying additional Capitation fee.

Thanking you.

Yours faithfully,  
Digitally signed  
by MILIND V  
OGALE  
Date: 2022.08.12  
15:15:51 +05'30'  
(M. V. Ogale)  
Assistant Director  
Maharashtra Fire Service

**Copy to:**

1. The Director, Maharashtra Fire Service, Mumbai.
2. The Asst. Director, Town Planning, Satara.