

**Government of Andhra Pradesh**  
**A.P. State Disaster Response and Fire Services Department**

**Provisional Fire No Objection Certificate**

File No: -----/MSB/2024

Date: 17/09/2024

Sir/Madam,

Sub: Andhra Pradesh State Disaster Response and Fire Services Department - Issue of Provisional No Objection Certificate to the Proposed Construction of Educational Building of ( \_\_\_\_\_ ), \_\_\_\_\_ - Regarding.

Ref: 1. Online Application Dt. 27-08-2024

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You are hereby issued Provisional NOC for School/College building subject to the following reasonable fire prevention and safety methods.

**1.Ensure two exits for every building:**

- a. One Staircase and a ramp widely separated from each other.
- b. Two Staircases widely separated from each other.
- c. One Staircase and fenced pathway to adjacent buildings on all floors suitable for Evacuation of students.
- d. One Staircase and a tube lift (transparent fireproof lift fitted outside the building) with an exhaust fan on top (to remove smoke from the lift if any) powered by the main generator.
- e. If the second staircase is not possible, provide a slider or tube lift with exhaust fan (connected outside to building), or a German chute, or horizontal connection between the neighborhood buildings.

This is to ensure more than one exit pathway teachers, students and staff to evacuate in case of any fire incident towards safe place. We have lost many lives in accidents due to lack of alternative exit the only exit was engulfed in smoke and fire.

**2.Electrical Safety:**

- a. All Electrical wirings in the building shall confirm the code of practice for Electrical wiring IS:732:1989 and also shall confirm for Fire Safety Wiring of the building Electrical Installations as per IS:1646:2015. Most common mistake is that the neutral wires to the three pin plugs are not of sufficient thickness to carry the current in case of any short circuits.
- b. Installation of Miniature Circuit Breakers (MCBs) on all floors.
- c. No overloading of power sockets in any Educational Building.
- d. 10 years old wiring to be changed, especially where high power consuming appliances such as Air conditioners, Electrical/Mechanical/Computer labs, Data Centers, High tech labs, etc.,
- e. Grounding/Earthing shall be done. For details refer to IS 3043:1987.
- f. Lightning conductors may be provided for high rise buildings exceeding 5 floors.
- g. No High Tension Lines should run inside or in close proximity (<6 meters) to any Educational institution buildings.

The above is to prevent the electrical short circuits which are the root-cause in 90% of the School fire accidents across the country.

### **3.Kitchen Safety:**

- a. Kitchen should be away from class rooms , dormitories and labs. Preferably in separate building.
- b. The kitchen shall be separated from other parts of the same building by 60 min fire rated wall and 60 min fire resistance doors.
- c. However, no kitchen shall be allowed in the same multi-storey building having classrooms or dormitories in upper floors.
- d. Two 4.5 kg Co2 Fire Extinguishers, Gas Detection and Alarm System shall be installed, they shall be kept in good working condition.
- e. LPG Cylinders shall be located outside the kitchen with proper ventilation and protection from Rain and Sunlight.
- f. Five Ways of putting up LPG Cylinder Fires (Pictorial /Cartoon) shall be displayed in the kitchen.

### **4.Water availability @ all floors:**

- a. Minimum pressure of water to put out the fires to be 3.5 Kg/cm<sup>2</sup>. The more the better.
- b. This is to put out initial fires till the fire engine arrives.
- c. The pressure of water can be obtained through any ISI marked pumps which are reliable, easy to maintain and affordable.
- d. These pumps should be easily handled by women teachers, students and staff without any special training.
- e. These pumps should be flexible to draw water from normal taps or sump or drain or any water source available in the building.
- f. Water in sump or overhead tank that can be used for initial firefighting purpose should be reasonable to last for half an hour.
- g. You are not obligated to buy from any particular vendor or hire any particular contractor or be guided by any liaison officer or middleman to install fire safety equipment.
- h. Please don't use water sprinklers in any computers, electrical or chemistry labs as they will compound the problem.
- i. Use Co<sub>2</sub> Cylinders or Dry Chemical powder fire extinguishers @ every floor with one per 15 meters and in every lab.

Usually the Response time of fire engine arrival is about 20 minutes. The above arrangements give tools to put out the initial fires to the people (teachers, students and staff) who happen to be present in school at the time of any fire incident before the fire engine arrives. So, any equipment installed should be easy to use by everyone. If the teachers, students and staff can't handle, don't install any equipment.

### **5.Smoke Test:**

In case of fully Air conditioned buildings, in most fire accidents, it is smoke that suffocate and kills. Fully air conditioned buildings are generally sealed and there is no vent for smoke to escape. Therefore, we are mandating smoke management which is ensured through "Smoke Test". (This is not applicable in case of partial air conditional buildings where smoke can easily disperse into air unlike in fully covered buildings).

- a. "Smoke Test" tests to ensure the staircases free from smoke for about 2 hours to enable all students, teachers and staff to evacuate from the building in case of any fire accident.
- b. Make sure air conditioner ducts don't compound the problem by carrying smoke to all parts of the building.
- c. Fire proof materials such as iron doors, iron shutters, thick glass, curtains that can shield smoke can be used.
- d. Also exhaust fans that are connected to standby power source can be installed to evacuate smoke from staircases or exit paths.

**6. Where schools are not permitted:**

- a. In thatched roof or any inflammable material roof (Plastic sheets etc.,) buildings.
  - b. In cellar or basement of buildings.
  - c. In mixed occupancies where the ground floor is occupied with any shops particularly cloth, chemicals or any toxic inflammable materials.
7. As a Policy, no retrospective application of rules shall be made for building having any NOC as long as they comply with that NOC requirements till the life of the building.
8. If you experience any undue hardship or practical difficulty in implementing any of the above suggested requirements, please don't hesitate to meet in person without appointment (9441236448) as ensuring fire safety with better and affordable technology is a continuous learning and collaborative endeavour.

Your sincerely,

Director General  
State Disaster Response & Fire Services  
Andhra Pradesh, Vijayawada

To  
The Management of \_\_\_\_\_, \_\_\_\_\_

Copy to the District Educational Officer, Concerned.