



## Office of Laboratory Safety and Environmental Health (OLSEH), IISc, Bangalore

### Policy for Emergency Exits for Laboratory Personnel's/Staffs

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Dear Colleagues and Students:

This document outlines OLSEH Policy to ensure for Emergency Exits for safety while working in the laboratories and research facilities. For guidance on safe practices, please refer to the safety manual available at: <https://olseh.iisc.ac.in/>. Please remember that, it is the responsibility of the Lab managers/faculty to ensure safety in their labs.

## 1. Introduction:

Every building meant for human occupancy shall be provided with Emergency exits sufficient to permit safe escape of occupants in case of fire or other emergency. An Emergency Exit is a clear, safe way to get out of a structure or building. **As per IS: 1644, 2.7:8.2** every room /building with a **capacity of 100 persons** should have **at least two doorways Emergency Exit Doors** as remote from each other as practicable.

- **Why Emergency Exit is important?**

An emergency exit is a clear, safe way to get out of a structure or building. It provides fast exit in case of emergency such as a fire. First responders may also use it as a way into the building so it is very important to make sure they are ready to use at all times.

- **Why do exit doors open out?**

When a mob of people rushes an exit, it's very hard for somebody to open the door inwards. Everyone pushes up against the door, and there is no room for it to open. For this reason, an effective emergency exit door needs to open outward, moving with the force of the mob.

- **What are the 3 parts of an Emergency Exit Route?**

An "Exit Route" is a continuous and unobstructed path of exit within a workplace to a place of safety (including refuge areas). It consists of three parts: the exit access, the exit, and the exit discharge.

## 2. Safety Policy for Emergency Exits:

The following general requirement shall apply to Emergency exits:

- I. **OSHA** regulations require that Emergency exit routes should be unobstructed by segregation or storage of materials, equipment, locked doors, or dead-end corridors and proper lighting system should be there.
- II. Firefighting equipment where provided along exits shall be suitably located and clearly marked but must not obstruct the exit way and there should be clear indication about its location from either side of the exit way.
- III. Make sure exit routes are marked properly and that employees know where their nearest exits are.
- IV. All emergency exits shall provide continuous means of egress to the exterior of a building or to an exterior open space leading to assembly point.
- V. Each exit must be clearly visible and marked by a sign reading **"Exit."**

- VI. The exit door should be with an alarm system, if a person approaches the door to exit, they will press on the exit push bar. The alarm continues to sound for a preset period (usually 15 seconds). At the end of the preset period, the door unlocks, allowing free exit.
- VII. According to **NBC 2016**, Emergency exit passageway (at ground) and staircase lighting shall also be connected to alternative supply. The color of the exit signs shall be green.
- **Types of Emergency Exits:**
    - a) Exits shall be either horizontal or vertical type. An exit may be doorway, corridor and passage to an internal staircase or external staircase, ramp or to the assembly point.
    - b) Lifts escalators and revolving doors shall not be considered as exits.
- VIII. According to **Building Bye-Laws 4.8. I.**, emergency exits shall be located so that the travel distance on the floor shall not exceed 22.50 m. whenever more than one exit is required for a floor of a building they shall be placed as remote from each other as possible. All the exits shall be accessible from the entire floor area at all floor levels.
- **Staircase Requirement:**

Single staircase is accepted for educational institutions where floor area does not exceed 300 sq m. and height of the building does not exceed 24 m. The single staircase in such case shall be on the outer wall of the building.

    - a) Minimum Width required for Stairways- **1.5 m.**
    - b) Minimum Width required for Passageway/Corridors-**1.5m.**
  - **Doorways:**
    - a) Exit doorways shall open outwards, that is away front the room but shall not obstruct the travel along any exit. No door when opened shall reduce the required width of stairway or landing to less than 100 cm. Overhead or sliding door shall not be installed.
    - b) Exit doorways shall be openable from the side, which they serve without the use of a key.
    - c) According to **NBC 2016**, Door should not be too heavy to operate and shall not require a force of more than 22 N to operate.
  - **Stairways:**
    - a) The internal staircase location will be installed according to Fire load of the building.
    - b) The minimum tread of stairways shall be 30 cm. The treads shall be constructed and maintained in a manner to prevent slipping.
    - c) Handrails shall be provided with a minimum height of 100 cm. from the center of the tread.
    - d) No electrical shafts/AC ducts or gas pipe etc. shall pass through the staircase. Lift shall not open in staircase landing.
    - e) No combustible material shall be used for decoration/wall paneling in the staircase.
  - **Emergency Response Directory:**

Emergency Response Service: 5555/108 (080-2293-5555 from non IISc Phones)  
Security office: 080-22932400/22932225  
Health Centre/ Ambulance: 080-22932227/22932234  
Dharmendra Singh, Safety Officer: 080-22933199  
M.S Ramaiah hospital: 080-23608888,  
Snake Rescue volunteer: 080-22932506  
Electricity-General: 080-22932206/22932018