

EMERGENCY EXIT ROUTES

How would you escape from your workplace in an emergency? Do you know where all the exits are in case your first choice is too crowded? Are you sure the doors will be unlocked and that the exit access, such as a hallway, will not be blocked during a fire, explosion, or other crisis? Knowing the answers to these questions could keep you safe during an emergency.

What is an exit route?

An exit route is a continuous and unobstructed path of exit travel from any point within a workplace to a place of safety. An exit route consists of three parts:

- Exit access- portion of an exit that leads to an exit.
- Exit- portion of an exit route that is generally separated from other areas to provide a protected way of travel to the exit discharge.
- Exit discharge- part of an exit route that leads directly outside or to a street, walkway, refuge area, public way or open space with access to the outside.

How many exit routes must a workplace have?

Normally, a workplace must have at least two exit routes to permit prompt evacuation of employees and other building occupants during an emergency. More than two exits are required, however, if the number of employees, size of the building, or arrangement of the workplace will not allow employees to evacuate safely. Exit routes must be located as far away as practical from each other in case fire or smoke blocks one.

Exception: If the number of employees, the size of the building, its occupancy, or the arrangement of the workplace allows all employees to evacuate safely during an emergency, one exit route is permitted.

What are some other design and construction requirements for exit routes?

- Exit routes must be permanent parts of the workplace.
- Exit discharges must lead directly outside or to a street, walkway, refuge area, public way, or open space with access to the outside. These exit discharge areas must be large enough to accommodate the building occupants likely to use the exit route.
- Exit stairs that continue beyond the level on which the exit discharge is located must be interrupted at that level by doors, partitions, or other effective means

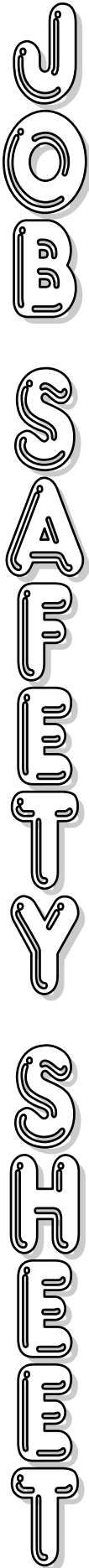
that clearly indicate the direction of travel leading to the exit discharge.

- Exit route doors must be unlocked from the inside. They must be free of devices or alarms that could restrict use of the exit route if the device or alarm fails.
- Side-hinged exit doors must be used to connect rooms to exit routes. These doors must swing out in the direction of exit travel if the room is to be occupied by more than 50 people or if the room is a high-hazard area.
- Exit routes must support the maximum permitted occupant load for each floor served, and the capacity of an exit route may not decrease in the direction of exit route travel to the exit discharge.
- Ceilings of exit routes must be at least 7 feet, 6 inches high.
- An exit access must be at least 28 inches wide at all points. Where there is only one exit access leading to an exit or exit discharge the width of the exit and exit discharge must be at least equal to the width of the exit access. Objects that project into the exit must not reduce its width.
- Outdoor exit routes are permitted but must meet the minimum height and width requirement for indoor exit routes and must
 1. Have guardrails to protect unenclosed sides if a fall hazard exists.
 2. Be covered if snow or ice is likely to accumulate, unless the employer can demonstrate accumulations will be removed before a slipping hazard exists.
 3. Be reasonably straight and have smooth, solid, substantially level walkways.
 4. Not have a dead-end longer than 20 feet.

What are the requirements for exits?

- Exits must be separated by fire resistant materials—that is, one-hour fire-resistance rating if the exit connects three or fewer stories and two-hour fire resistance rating if the exit connects more than three floors.
- Exits are permitted to have only those openings necessary to allow access to the exit from occupied areas of the workplace or to the exit discharge. Openings must be protected by a self-closing, approved fire door that remains closed or automatically closes in an emergency.

What are the maintenance, safeguarding, and operational features for exit routes?





OSHA standards require employers to do the following:

- Keep exit routes free of explosive or highly flammable furnishings and other decorations.
- Arrange exit routes so employees will not have to travel toward a high-hazard area unless the path of travel is effectively shielded from the high-hazard area.
- Ensure that exit routes are unobstructed such as by materials, equipment, locked doors, or dead-end corridors.
- Ensure that safeguards designed to protect employees during an emergency remain in good working order.
- Provide lighting for exit routes adequate for employees with normal vision.
- Keep exit route doors free of decorations or signs that obscure the visibility of exit route doors.
- Post signs along the exit access indicating the direction of travel to the nearest exit and exit discharge if that direction is not immediately apparent. Also, the line-of-sight to an exit sign must be clearly visible at all times.
- Mark doors or passages along an exit access that could be mistaken for an exit "Not an Exit" or with a sign identifying its use (such as "Closet").
- Install "EXIT" signs in plainly legible letters.
- Renew fire-retardant paints or solutions often enough to maintain their fire-retardant properties.
- Maintain exit routes during construction, repairs, or alterations.
- Provide an emergency alarm system to alert employees, unless employees can promptly see or smell a fire or other hazard in time to provide adequate warning to them.

Are employers required to have emergency action plans?

If you have 10 or fewer employees, you may communicate your plan orally. If you have more than 10 employees, however, your plan must be written, kept in the workplace, and available for employee review. Although employers are required to have an emergency action plan (EAP) only when the applicable OSHA standard requires it, OSHA strongly recommends that all employers have an EAP. Here are the OSHA standards that require EAP's:

- Process Safety Management of Highly Hazardous Chemicals - 1910.119
- Fixed Extinguishing Systems, General - 1910.160
- Fire Detection Systems, 1910.164
- Grain Handling - 1910.272

- Ethylene Oxide - 1910.1047
- Methylenedianiline - 1910.1050
- 1,3-Butadiene - 1910.1051

What are the minimum elements of an emergency action plan?

- Procedures for reporting fires and other emergencies.
- Procedures for emergency evacuation, including the type of evacuation and exit route assignments.
- Procedures for employees who stay behind to continue critical plant operations.
- Procedures to account for all employees after evacuation.
- Procedures for employees performing rescue or medical duties.
- Name or job title of employees to contact for detailed plan information.
- Alarm system to alert workers. In addition, you must designate and train employees to assist in a safe and orderly evacuation of other employees. You must also review the emergency action plan with each employee covered when the following occur:
 1. Plan is developed or an employee is assigned initially to a job.
 2. Employee's responsibilities under the plan changes.
 3. Plan is changed.