

Employee Alarm System

Description:

The employee alarm system standard applies to all emergency alarms installed to meet a particular OSHA standard. It does not apply to discharge or supervisory alarms required on various fixed extinguishing system or to supervisory alarms on fire suppression, alarm or detection systems unless they are intended to be employee alarm systems.

Regulatory Reference

29 CFR § 1910.165 Employee alarm systems

Applies to:

Employers who have 11 or more employees in a workplace or to workplaces with 10 or fewer employees where direct voice notification of an emergency is not possible. Whether an alarm system or direct voice notification system is used, it must be audible to all employees.

General Requirements:

1. The employee alarm system shall provide warning for necessary emergency action as called for in the [employer's Emergency Action Plan], or for reaction time for safe escape of employees from the workplace or the immediate area, or both.
2. The employee alarm shall be capable of being perceived above ambient noise or light levels by all employees in the affected portions of the workplace. Tactile devices may be used to alert those employees who would not otherwise be able to recognize the audible or visual alarm.
3. The employee alarm shall be distinctive and recognizable as a signal to evacuate the work area or to perform actions designated under the [employer's Emergency Action Plan].
4. The employer shall explain to each employee the preferred means of reporting emergencies, such as manual pull box alarms, public address systems, radio or telephones. The employer shall post emergency telephone numbers near telephones, or employee notice boards, and other conspicuous locations when telephones serve as a means of reporting emergencies. Where a communication system also serves as the employee alarm system, all emergency messages shall have priority over non-emergency messages.
5. The employer shall establish procedures for sounding emergency alarms in the workplace. For those employers with 10 or fewer employees in a particular workplace, direct voice communication is an acceptable procedure for sounding the alarm provided all employees can hear the alarm. Such workplaces need not have a back-up alarm system.
6. The employer shall assure that all devices, components, combination of devices or systems constructed and installed to comply with the standard are approved. Steam whistles, air horns, strobe lights or similar devices, or tactile devices meeting the requirements of this section are considered to meet this requirement for approval.

7. The employer shall assure that all employee alarm systems are restored to normal operating condition as promptly as possible after each test or alarm. Spare alarm devices and components subject to wear or destruction shall be available in sufficient quantities and locations for prompt restoration of the system.
8. The employer shall assure that all employee alarm systems are maintained in operating condition except when undergoing repairs or maintenance.
9. The reliability and adequacy of non-supervised employee alarm systems shall be assured by testing performed every two months. A different actuation device shall be used in each test of a multi-actuation device system so that no individual device is used for two consecutive tests.
10. System power supplies shall be maintained and replaced as often as is necessary to assure a fully operational condition. Back-up means of alarm, such as employee runners or telephones shall be provided when systems are out of service.
11. The employer shall assure that employee alarm circuitry installed after January 1, 1981, which is capable of being supervised is supervised and that it will provide positive notification to assigned personnel whenever a deficiency exists in the system. The employer shall assure that all supervised employee alarm systems are tested at least annually for reliability and adequacy.
12. Servicing, maintenance and testing of employee alarms shall be done by persons trained in the designed operation and functions necessary for reliable and safe operation of the system.
13. The employer shall assure that manually operated actuation devices for use in conjunction with employee alarms are unobstructed, conspicuous and readily accessible.

Training Requirements:

Employees must be trained to know the nature of the employee alarm system. Training should be done in conjunction with required training for the Emergency Action and Fire Prevention Plan. Employee training should be documented, although there are no documentation requirements set out in the OSHA standard.

Maintenance and Review

Required periodic tests of the emergency alarm system are required, especially for the specified supervised and unsupervised systems.

If the number of employees at workplaces with 10 or fewer employees increases, or conditions change that affect the audibility or otherwise perceptibility of the system, the system must be re-evaluated and/or revised.

Employee training should be scheduled on an on-going basis, and new employees trained as part of their orientation to the company and assigned duties.

Additional Information and Resources

Also see Emergency Action Plans and Fire Prevention in this guide.