Fire Alarm Systems

Fire alarm systems must have both audible and visible alarms in newly constructed facilities. For existing facilities with fire alarm systems, visible alarms are required when a fire alarm system is being (1) installed, (2) upgraded, or (3) replaced. Under the ADA, accessible fire alarms are required in public and common use areas, transient lodging, and residential facilities; visible fire alarms must be easily installed in employee work areas.

Public and Common Use Areas (2010 ADA Standards for Accessible Design 215.2)

Any area open to the general public must comply with the ADA standards for accessible fire alarm systems. An example of a public use area is an exhibit hall in a museum. An example of a common use area would be an interior corridor in a building. Common use areas do not have to be for public use.

Employee Work Areas (215.3)

Employee work areas are defined as any space that is used only by employees and only to perform work. If an employee work area has audible alarm coverage, the wiring of the alarm system should be designed to easily support the installation of visible alarms if needed by an employee with a disability.

Transient Lodging (215.4)

Transient lodging includes hotels, motels, inns, dormitories, and resorts. Transient lodging facilities that contain five or fewer rooms for rent and are owner occupied do not need to comply with this requirement. Visible fire alarms are required in the sleeping areas of a certain number of transient lodging guest rooms. Visible fire alarms are not required in guest room restrooms, but ideally the placement of the appliance would at least facilitate the signal reaching the bathroom.

Residential Facilities (215.5)

In residential facilities with dwelling units, at least two percent of all units, but no less than one unit, must provide accessible fire alarm systems. The fire alarm system in a residential dwelling unit must extend to a point within the unit that is in the vicinity of the smoke detection system. Accessible smoke alarms are also required for residential facilities. The smoke alarm system can be integrated with the fire alarm system. Many state codes also require accessible carbon monoxide detectors.
Fire Alarm Systems

Requirements for Fire Alarm Systems

Fire alarm pulls must meet the following requirements for operable parts:

1. The pull lever must be operable with one hand.

2. The force to activate the pull lever cannot be greater than five pounds.

3. The pull lever cannot require tight grasping, pinching, or twisting of the wrist. In addition, the pull lever should be within reach range or between 48 inches and 15 inches above the finish floor or ground.

4. Under the ADA, audible alarms must have a sound level that is not greater than 110 dB. In addition, the requirements for visible fire alarms are required to meet the following standards:

   1. The flash rate must be between one and two flashes per second.

   2. The color must be either clear or white.

Visible fire alarm systems that contain more than two strobes in a room or space require synchronization.

For more information, call and speak to an ADA specialist at 1-800-949-4232. All calls are confidential.