



Fire Alarm Systems

Purpose: This fact sheet is intended to provide an overview of the Fire alarm system requirements imposed by the 2010 Americans With Disabilities Act Standards (ADAS).

Summary: When alarm systems are installed, upgraded, or replaced in new construction as well as existing facilities, such systems must have both audible and visible notification devices (**ADAS 215.1**). The ADA establishes the general requirements for when and where they are necessary and uses the referenced standard NFPA 72 (1999 or 2002 edition) from the National Fire Protection Association (NFPA) to establish the technical specifications. Those specifications are used for decibel level*, strobe intensity, and placement of the devices based on room configuration.

Public and Common Use Areas (ADAS 215.2)

Alarms in public use areas and common use areas must comply with NFPA 72.

Public use: Interior or exterior rooms, spaces, or elements that are made available to the public.

Common Use. Interior or exterior circulation paths, rooms, spaces, or elements that are not for public use and are made available for the shared use of two or more people.

Employee Work Areas (215.3)

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.

Employee work areas: All or any portion of a space used only by employees and used only for work. Corridors, toilet rooms, kitchenettes and break rooms are not employee work areas.

Transient Lodging (215.4, 224.4)

Transient lodging includes hotels, motels, inns, dormitories, and resorts. In newly constructed transient lodging guest rooms that are required to have communication features (ADAS 224.4) fire alarms shall be permanently installed complying with NFPA 72.

Residential Facilities (215.5, 809.5)

In residential facilities with dwelling units, at least two percent of all units, but no less than one unit, must have communication features and therefore must provide visible fire alarm systems. The fire alarm system in a residential dwelling unit must extend to a point within the unit that is near 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.

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 an ADA specialist at **1-800-949-4232**. All calls are confidential.

* ADAS 702.1, the maximum allowable sound level of audible notification appliances shall have a sound level no more than 110 dB at the minimum hearing distance from the audible appliance.

Content was developed by the Pacific ADA Center, and is based on professional consensus of ADA experts and the ADA National Network..



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