

FARMINGTON FIRE-RESCUE



"Serving Those in Need"

430 Third St.
Farmington, MN 55024
651-280-6940



Fire Alarm Systems

Subject: Fire Alarm systems shall be installed or modified with a fire inspection permit and be in compliance with the following requirements:

Statement of Purpose:

The Farmington Fire-Rescue Department recognizes the importance of fire alarm systems, which often play a major role in loss prevention during a fire emergency. The basic purpose of a fire alarm system is to detect a fire in its early stages, notify the building occupants that there is a fire emergency and report the emergency to first responders.

Submittal Requirements:

- A permit application signed by a state licensed alarm contractor.
- A check made out to the City of Farmington in the amount required as stated on permit application.
- A minimum of 2 sets of plans shall be submitted to the Deputy Fire Chief or their designee for approval. Plans will include:
 - Connection diagrams.
 - Specification data sheets.
 - Schedules, for each device, including: location, function, and zoning.
 - Complete diagrams indicating: devices, components, interconnecting wiring, indicate labeling and descriptions on equipment.
 - Floor plans indicating device and component locations, conduit, raceway and cable routes.
 - Power connections, including source and branch circuit data.
 - Plan layout and details of: fire alarm control panel, fire alarm subpanels/transponders, and annunciator

General Requirements:

- Fire alarm system shall meet the requirements of current MSFC and the current standard of NFPA 72.
- All components of the system must be UL listed for their application, compatible and installed per current applicable NFPA 72, (10) National Electric Code and manufacturer's requirements.
- Wiring may be either a Class A or Class B Wiring System. (Exception: When a fire alarm system is used to actuate an extinguishing system that protects a special hazard with high value, Class A circuitry will be required.

Procedure:

- Alarm verification is required for all systems using smoke detectors.
- When Central Station notification is required or otherwise provided, it must be through a U.L. listed communicator, or NFPA Listed Control Panel. All Central Stations must be U.L. listed.
- Alarm horn must meet audibility requirement of NFPA 72.
- A U.L. 72 document is required on the system. The U.L. 72 document shall be current and required for the life of the alarm system and the life of the building. A copy of the U.L. 72 application OR document must be provided prior to the final of the building.
- All systems using standard horns or speakers must be set for temporal time.
- Remote alarm indicating devices are required at locations when duct detectors are not visible from floor.
- All pull stations will need approved covers to prevent accidental activation when required by the fire code official.
- A permit application signed by the low voltage contractor or electrical engineer.
- Water flow alarm must be monitored as a distinct signal.
- Low and high air pressure on sprinkler systems containing air pressure shall be monitored.
- Devices designed to initiate a specific function or action, i.e. duct smoke detection, elevator recall, and door hold open detectors shall be monitored only for supervision.
- Power supply for alarm systems must be on a dedicated circuit. Breakers for all alarm system components, including exterior sprinkler alarms must have approved locking devices to prevent the accidental disconnecting of power.
- Monitoring systems must comply with NFPA 72 including panel requirement for audible trouble signals and must have two means of signal transmission when using a DACT.
- A zone map is required on all multiple sprinkler riser or zoned systems. The map must be permanently mounted adjacent to sprinkler riser, alarm panel and annunciator panel.
- Completion of NFPA 72, installation/testing forms.

Inspections Required:

- The Farmington Deputy Fire Chief must be contacted for final inspection of the completed job. The inspection will include the following. Approved and acceptance must comply with NFPA 72.
 - Test for proper operation of each device.
 - Random testing for system trouble.
 - Random testing for ground fault trouble.
 - Correct operation on battery or standby power.

Monitoring & Alarm:

- Systems with 20 or more heads must be equipped with central station monitoring service.
 - Monitoring systems must comply with NFPA 72 including panel requirement for audible trouble signals and must have two means of signal transmission.
 - All components of the system must be UL listed for their application and be compatible.
 - The fire alarm control panel or a remote annunciator must be located at the main entrance unless otherwise approved.
 - A smoke detector and pull station are required in the room or area of FACP.
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Rationale: Minnesota State Fire Code and NFPA 72

No Work shall be started without a permit and reviewed set of plans on the job site.
