



Fire alarm systems shall be installed with a fire inspection permit and be in compliance with the following requirements:

General Information

- A. All systems shall be installed according to the Minnesota State Fire Code and the National Fire Protection Association (NFPA) 72.
- B. All system components must be listed by the Underwriters Laboratory (UL) and installed in accordance with their listing.
- C. A copy of the approved plan and permit shall always be on site.
- D. A manual pull station is required near the sprinkler riser in sprinkled structures.
- E. An NFPA 72 installation and completion form is required at the time of the final inspection.

Submittal Requirements

- A. A completed permit application.
- B. A minimum of two sets of scaled plans documenting the locations of all devices.
- C. Manufacturer's specifications on alarm panel(s) and all devices.
- D. Description of zones and how they will be listed.
- E. Back up battery calculations.
- F. A check made out to the City of Ramsey based on the valuation table on the permit application form.

Permit Issuance

- A. After plans are reviewed, a permit will be issued. You will receive one (1) copy of the reviewed plans to be placed on the job site.
- B. No work shall begin until a permit is issued and an approved set of plans are on the job site. Permits shall be posted in a conspicuous place on the job site.

Monitoring Annunciation

- A. The fire alarm control panel or a remote annunciator must be located at the main entrance or an approved location.
- B. 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.
- C. Low-pressure and low-temperature alarms on fire sprinkler systems shall be monitored by the fire alarm system.

System Components and Hardware

- A. Monitoring must comply with NFPA, including panel requirements for audible trouble signals, and have two means of signal transmission.
- B. Remote alarm indicating devices are required at locations when duct detectors are not visible from the floor.
- C. The power supply for alarm systems must be on a dedicated circuit. Breaker locks shall be installed on all circuits that protect alarm system components to ensure that power is not disconnected from the system. The fire alarm panel shall have the panel identification with the correct circuit number. The electrical panel must have the "Alarm Panel" permanently marked on it next to the circuit.
- D. All devices on addressable systems shall be labeled to coincide with the annunciator panel.
- E. All indicating sprinkler control valves must be secured and electronically supervised.
- F. The fire alarm control panel must be located in an enclosed room, i.e., mechanical room, riser room, etc. The Fire Prevention Bureau should give prior approval of the location.
- G. A smoke detector is required to be installed in the room where each fire alarm panel, monitoring panel, dialer, or any other panel that is part of the system is located.
- H. Each floor shall have its own fire alarm zone and be annunciated at the panel.
- I. Zoning shall be approved by the Fire Prevention Bureau.

Inspections Required

- A. 24-hour advance notice to the Fire Inspection Division is required for inspections and witnessing tests.
- B. System must be 100 percent tested prior to calling for inspection. If an acceptance test of a system fails, a re-inspection must be scheduled. Re-inspection fees are \$50.00.
- C. All devices will be tested for proper operation. Smoke detectors, heat detectors, pull stations, etc.
- D. All sprinkler control valves shall be tested.
- E. Test all horns and strobes. The decibel level and light intensity must be set correctly and synchronized.
- F. Test primary and secondary phone lines.
- G. Test battery backup via AC loss.
- H. Magnetic door devices release, doors close and latch on activation of any device.
- I. Ventilation system shutdown upon activation of duct smoke detectors.
- J. Smoke fire dampers close upon activation. Dampers do not have to be interconnected.
- K. Contact the alarm company to verify the correct signals and addresses were received.
- L. Completed NFPA 72 installation and testing form.