

## **Chanhassen Fire Department**

FIRE PREVENTION BUREAU

7700 Market Blvd. PO Box 147 Chanhassen, MN 55317 Ph. 952.227.1150 Fx. 952.227.1190

## FIRE ALARM SYSTEMS #01-1990

- 1. Fire alarm system shall meet the requirements of current MSFC and the current standard of NFPA 72.
- 2. Two (2) sets of plans shall be submitted to the Fire Department for approval. Plans shall include:
  - a. Connection diagrams.
  - b. Specification data sheets.
  - c. Schedules, for each device, including: location, function, and zoning.
  - d. Complete diagrams indicating: devices, components, interconnecting wiring, indicate labeling and descriptions on equipment.
  - e. Floor plans indicating device and component locations, conduit, raceway and cable routes.
  - f. Power connections, including source and branch circuit data.
  - g. Plan layout and details of: fire alarm control panel, fire alarm subpanels/transponders, and annunciator.
- 3. 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.
- 4. All components of the system must be U.L. listed for their application, compatible and installed per current applicable NFPA 72, (10) National Electric Code and manufacturer's requirements.
- 5. Alarm verification is required for all systems using smoke detectors.
- 6. 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.
- 7. Alarm horn must meet audibility requirement of NFPA 72, which would normally require an alarm horn in each unit.
- 8. The system shall be zoned per Chanhassen Fire Department requirements.
- 9. 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.

- 10. A fully-function annunciator must be provided per Fire Marshal approved location if the control panel is remotely located.
- 11. All systems using standard horns or speakers must be set for temporal time.
- 12. The Chanhassen Fire Marshal must be contacted for final inspection of the completed job. The inspection will include the following. Approved and acceptance must comply with NFPA 72.
  - a. Test for proper operation of <u>each</u> device.
  - b. Random testing for system trouble.
  - c. Random testing for ground fault trouble.
  - d. Correct operation on battery or standby power.
- 13. Remote alarm indicating devices are required at locations when duct detectors are not visible from floor.
- 14. All pull stations will need approved covers to prevent accidental activation.
- 15. A permit application signed by the low voltage contractor or electrical engineer.
- 16. Water flow alarm must be monitored as a distinct signal.
- 17. Low and high air pressure on sprinkler systems containing air pressure shall be monitored.
- 18. 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.
- 19. 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.
- 20. 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.
- 21. 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.
- 22. Completion of NFPA 72, installation/testing forms.

Revisions 5/15/03 3/22/05 5/2/08 2/15/10 2/17/15 4/17/17

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