



Fire Alarm Installation Policy

Sections 903.4, 907.15 and 907 of the 2003 Minnesota State Fire Code is amended by adding the following:

System Design Requirements:

1. Fire alarm systems, monitoring of fire alarm systems, automatic fire detectors, emergency voice alarm communication systems, and notification devices shall be designed, installed, and maintained in accordance with NFPA 72, current edition, Minnesota State Fire Code, Sections 903.4 and 907, and West Metro Fire-Rescue District Policy.
2. Annunciator panels and fire alarm panels must be accessible without the use of access security codes. For manufacturers with panels that are unavailable without the use of programming of an access security code, contact the Fire Prevention Staff for special requirements.
3. Silence and reset switches/buttons shall be provided on the FACP or annunciator panel. Said switches shall be secured from tampering by unauthorized persons of the public.

These requirements set out specifications in which a fire fighter responding to off normal condition will require no special knowledge/training or special security codes to operate at the fire alarm panels or annunciators.

Application Submittal:

Fire permit applications may be picked up at either New Hope or Crystal City Halls or District Website.

Plans and specifications: Submit (3) sets of complete plans and specifications for review and approval prior to system installation. The preferred minimum drawing size scale is 1/8th inch=one foot. A legible scale shall be used.

Plans and specifications shall include, but are not limited to:

1. a floor plan
2. location of all initiating and signaling devices
3. control and trouble-signaling equipment
4. annunciation
5. power connection
6. battery calculations
7. wiring diagram with wiring type and sizes
8. Cut sheets and/or listing specifications on all devices and equipment to be used in system.

Issuance of Permit:

1. After plans are reviewed and approved, Fire Prevention Staff will issue the permit which may be pick up at either Crystal or New Hope City Halls.
2. No work shall be started without a permit and an approved set of plans on the job site.

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Inspections:

1. Call the Fire Prevention Staff at (763) 537 2323 extension 2003 or 2004.
2. For all rough-in inspections of installations.
3. For testing of the system (24-hour notification is preferred so your date and time can best be accommodated).
4. For 24 hour battery tests when required.

Monitoring:

In multiple tenant buildings, only one central station monitoring company may monitor a system; piggy backing of systems is prohibited. The phone lines providing communication for the monitoring must be under direct control and responsibility of the building owner/duly authorized representative in a multiple tenant buildings.

General Requirements:

1. Both 2 wire and 4 wire, supervised systems are acceptable.
2. Manual pull stations shall be of the key re-settable type, utilizing the same key as the fire alarm panel.
3. Alarm verification is required for all systems using smoke detectors. Verification may be provided in the panel or in the smoke detectors. Manual pull stations shall not use verification. The maximum time limit on verification for smoke detectors shall not exceed thirty (30) seconds.
4. The fire alarm control unit, remote annunciator panel and access keys to locked fire alarm equipment shall be installed and maintained in a location approved by the Fire Prevention Staff.
5. The Fire Alarm Panel and annunciator shall have a separate visual and audible trouble, supervisory and alarm indication.
6. Visual indication for each zone to shown alarm condition.

Testing requirements and Final requirements:

1. Written operating instructions shall include a written sequence of operations, a detailed narrative description of the system inputs, annunciation, intended sequence of operations, expansion capability, and limitations shall be provided to the owner and placed in annunciator or fire alarm control panel (FACP) if one exists. A copy shall be submitted to the Fire Prevention staff for approval before placing in FACP and annunciator.
2. Approved zone maps shall be posted next to annunciator or fire alarm control panel. A copy of the zone map shall be submitted to the Fire Prevention Staff for approval before installation. Existing zone maps shall be updated when buildings and/or fire systems are remodeled, extended, altered, or modified. An acceptable zone map shall include the following:
 - If the fire alarm system is divided by zones, each zone shall be clearly indicated on the floor plan. The zone map shall show the general location of each zone with devices shown, or for addressable/intelligent systems, each device with its address and location. Location of waterflow devices, supervisory devices for PIV, WPIV, riser controls, or other system control valves.
 - The size shall be large enough and clear and legible but not smaller than 8 1/2 X 11. Zone maps shall be mounted in a frame, or laminated with rings attached and hung on the wall, or placed in a 3-ring binder with laminated or permanent pages that correspond to a master plan and index or referencing a plan.
 - The detailed zone map shall be placed forward floor plan with NO other markings other than rooms names and/or numbers, wall, and door locations. (Fire alarm plans are not acceptable as a zone map.)
3. An as-built plan will be required at final testing along with a Record of Completion paperwork.
4. The final test of the fire alarm system can be done at the same time as the test for monitoring of the system.
5. All functions of the system shall be tested,



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but not limited to, testing for operation of each device, waterflow, supervisory, testing for system troubles of each device, testing for ground fault trouble, correct operation on batter or standby power, and testing that all monitoring signals are properly sent to, and received by the monitoring company or dispatch. The address and building name shall be verified during the test.

6. Written verification, in the form of an alarm activity report, shall be provided by the monitoring company showing that all signals were properly received.
7. The Monitoring Company and telephone number shall be displayed on the FACP.
8. It will be the fire inspector's discretion on how many devices in the system will be tested at the time of a final function test.

For inspections Contact:

Aaron Surratt, Fire Inspector:
(763) 537-2323 extension 2004

Shelby Wolf, Fire Inspector:
(763) 537-2323 extension 2003

Fax: (763) 537-5333

