

North Maine Fire Protection District

9301 N. POTTER ROAD • DES PLAINES, ILLINOIS 60016 • PHONE 847.297.5020 • FAX 847.297.2853



Robert B. McKay
CHIEF

BOARD of TRUSTEES
Donald Neal
Dagmar Rutzen
Timothy Hamilton

Fire Alarm System Plan Review Packet

Dear resident, builder and/or contractor,

This packet was created to assist residents and contractors who are going to install or upgrade a fire alarm system in a property within the district and, in general, provide information about the plan review & inspection process. All information included within this packet and the plan review itself that you will receive, shall be incorporated into your design and installation of the fire alarm system. It is your responsibility to follow all information contained within this packet and the plan review. Information contained within this packet and the North Maine and FSCI plan review letter shall be followed for not only the application and designing process, but also the installation and final acceptance.

*****Note: ALL fire alarm plans shall be submitted to Fire Safety Consultants, Inc. (FSCI) for the beginning of plan review process (<https://www.firesafetyfsci.com/>). They are located at 2420 Alft Ln. Elgin, IL 60124. FSCI will forward any documentation to our department for the completion of the plan review process. The following link contains a letter of transmittal to assist with submitting documents to FSCI for review- (<https://www.firesafetyfsci.com/fire-protection-submittals/>). All fees from Fire Safety Consultants, Inc. are separate from those of the North Maine Fire Protection District and are the responsibility of the resident/builder/contractor. The North Maine Fire Protection District reserves the right to have FSCI conduct inspections of properties and/or systems if necessary.**

The North Maine Fire Protection District (NMFPD) follows the National Fire Protection Association (NFPA) 72, 2019 Edition: NFPA 1, Uniform Fire Prevention Code, 2021 Edition, and all codes/ordinances of the North Maine Fire Protection District.

We want to create a positive working relationship, and at any time you have a question, please call the fire prevention bureau at 847-297-5020.

Information listed is not in any particular order, so please read carefully.

Special Comment: A new or updated system will require a new radio if there is no position number for that radio at time of plan review. A new position number shall be required to be generated. Any fire alarm system, not currently monitored by Avantguard per NMFPD ordinance, that modifies, updates, or installs a new fire alarm system shall be required to change

FIRE ALARM SYSTEM PLAN REVIEW CHECKLIST

the alarm to be monitored a by Avantguard.

Reviewed as noted:

1. Fire alarm systems shall be installed per NFPA 72, 2019 Ed, and the adopted codes and ordinances of the North Maine Fire Protection District (NMFPD). Ordinance 2021-0-03 has been adopted by the fire district as of March 1, 2021. Please refer to this and all North Maine ordinances for current codes, amendments, and guidelines to be followed within the fire district.
 2. Contractor(s) shall provide the following:
 - a. TWO (2) sets of **stamped** architectural / structural to scale drawings of the complete project – ONE (1) will become property of NMFPD.
 - b. THREE (3) sets of **stamped** (\geq NICET Level II or licensed through State of Illinois) fire alarm system to scale drawings – ONE (1) will become property of NMFPD and ONE (1) will become the property of FSCI.
 - c. Drawings are to include:
 - All installed devices and their associated program numbering within system. All installed devices shall be physically numbered to coincide with the device displayed on the fire alarm panel/annunciator.
 - Site plan
 - Fire alarm device legend
 - Square footage of areas protected shall be called out on drawings
 - Any other aspects deemed necessary by NMFPD or FSCI
 - d. Three (3) – complete sets of manufacturer's cut sheets. ONE (1) will become property of NMFPD and ONE (1) will become the property of FSCI.
- **All drawings shall be to scale and accurately display all fire alarm components. Contractor/or designee shall provide additional copies of drawings, cut sheets, calculations, or other documents to be stamped if required****
3. Owner/contractor/designee shall have on the job site, reviewed NMFPD fire alarm permit, a set of stamped drawings and cut sheets during the installation and acceptance test process for use by inspectors.
 4. All equipment used in the installation of a fire detection / alarm system shall display the UL trademark and all system components shall be compatible.
 5. The NMFPD requires all alarms to be monitored via wireless radio to their designated remote station known as Avantguard. This is in accordance with the NMFPD Monitoring Ordinance No. 2019-0-4. A new, modified, and/or updated system (not currently monitored by Avantguard) shall be required to be monitored by Avantguard, have a new radio to be installed, and obtain a new position number.
 6. Owner/contractor/designee shall provide descriptive building legend/diagram. The legend/diagram shall be securely mounted in a durable frame with a protective covering in location near front entrance (alongside or above annunciator panel) and next to the

FIRE ALARM SYSTEM PLAN REVIEW CHECKLIST

fire alarm control panel. The locations shall be approved by the fire department.

- a. Diagram/legend(s) shall show locations points, activating type device, number, and location, all floor levels or locations, and any special equipment, i.e., fire pumps, standpipes, flow switches, etc. Diagram(s) shall accurately correspond to the display of Fire Alarm Control Panel (FACP) / Remote Control Annunciator Panel point location word display that is addressable.
 - b. Any doors to rooms or corridors concealing any aspect of the controls, valves and/or power to equipment, utilities, fire suppression systems, fire alarm panel, or others deemed necessary by the NMFPD shall be properly identified/labeled. Letters shall be a minimum of 4 inches in height. Numbers shall not be spelled out. Such labels shall consist of: Laundry Room, Elevator Room, Electrical Room, Boiler Room, FACP, Sprinkler Room, Fire Pump Room, or others per NMFPD.
7. Alarm contractor/building representative(s) or property management shall provide emergency phone contacts list at completion of acceptance test. A copy shall be forwarded to RED Center, Avantguard/FSST, and the fire prevention bureau. Property owner or manager shall update these contacts **any time** there is a change. The fire department **shall not** be listed as an emergency contact.
 8. Sound and visual appliances shall be set at proper dB and candela levels per NFPA 72 and ADA requirements. Audio / visuals to be three-pulse temporal pattern and in synchronization with each other when two (2) or more devices are visible in line of sight to a human eye. Candela levels may need to be increased for more visual effect in hallways and basement areas.
 9. All wire used in the installation shall meet NFPA 72 & 70 requirements. Stranded wire shall be tinned at all connection or contact points in the system.

The system shall be connected to an isolated 110v circuit breaker. The breaker shall be **red** in color and have a proper lockout on said breaker. Red coloring shall not damage the device nor obscure the manufacturer's markings. On the inside of the fire alarm panel door, the circuit breaker numbers shall clearly display each circuit's designated location.
 10. All control valves to the fire sprinkler/suppression systems shall be monitored/supervised by fire detection/alarm system (single family residences are exempt). The fire alarm panel **shall** be capable of transmitting a supervisory signal to the monitoring agency.
 11. As-built PDF plans and cut sheets (includes architectural drawings) shall be provided to NMFPD upon completion of installation and acceptance of the fire alarm system. Final acceptance letter will not be issued until PDF is received of final as-builts and cut sheets.
 12. The owner of fire alarm system is responsible for annual service and testing per NFPA 72. PDF copies of test reports shall be submitted to NMFPD annually with additional

FIRE ALARM SYSTEM PLAN REVIEW CHECKLIST

copies kept on site accessible for viewing within the fire panel and property files.

13. An exterior weatherproof clear color strobe or horn/strobe shall be placed outside on the street side of the property. This shall be visible at all times and shall not become obstructed from view at any time. Additional strobes may be required by AHJ. The strobe or horn / strobe shall activate on water flow and/or fire alarm activation automatically.
14. Battery calculations shall be calculated as to type of fire alarm system. Remote and Local **(60 hours + 5 minutes)**. If using a UL Listed central station (24 Hours + 5 minutes) with maintenance contract, runner service, and fire alarm system is placarded by UL at time of acceptance test, as noted in NFPA 72 2019 Edition.
15. A fire alarm plan submittal form shall be filled out and become part of the file. If contractor does not have one, one can be provided by NMFPD.
16. An authorized key holder list form shall be filled out and returned to the fire department, RED Center dispatch center (premisealert@redcenter.org), and Avantguard/FSST (esm.data@fsstechnologies.com).
17. For testing, repair, fire drills usage, and/or inspections, notification of your alarm monitoring service shall be required.
18. Contractor shall provide **48-hour notice** for all **typical** inspections, i.e., rough, hanger, conduit, and other related field inspections, **72-hour** notice shall be given for inspections that require TESTING by the fire department.
 - a. **Prior to testing of the alarm system by Fire Department:** System shall have been tested in its entirety by contractor. All deficiencies shall be corrected prior to contacting the fire department.
 - b. **A notice to all occupants & visitors** shall be made 48 hours prior to testing. Posting of signs in visible locations or other approved method of notification shall be made.
19. AHJ reserves the right to require additional devices in areas not provided for on plans as submitted and / or as inspections and testing indicates a deficiency based on sound fire prevention practices and good judgment.
20. A remote annunciator that has been replaced/installed shall be compatible with the FACP installed. Location of annunciator shall be approved by fire official prior to installation.
21. Permit fees shall be paid in full before any calls for consultation, inspections are made, or full issuance of the fire alarm permit. Additional fees shall be assessed for non-compliance.
22. An approved Key Box (Knox box) is required on all buildings which have any type of fire alarm system, fire suppression system, or other buildings deemed necessary by the

FIRE ALARM SYSTEM PLAN REVIEW CHECKLIST

Fire Chief of the North Maine Fire Protection District or designated Fire Official of the Fire Prevention Bureau. Contact the Fire Prevention Bureau with any questions or for information pertaining to obtaining an approved unit. Models available can be viewed and purchased at www.knoxbox.com. “Knox box” is the only model key box allowed per North Maine ordinance and shall be purchased through their website.

23. Fire alarms system silence feature shall be programmed as follows: if upon an alarm activation and the “Silence” feature/button is pressed, the alarm horns shall be silenced, however, all visual strobe lights shall continue to flash. Visual strobe lights shall continue to flash until the complete fire alarm system is reset into normal/ready function.

It is understood that during the installation process, a rough inspection by this office shall be requested by the installer or building representative and be present at that time. Should field corrections or adjustments be needed - the installer, owner, and fire department shall discuss said corrections and adjustments. The adjustments will then be reviewed in accordance with the proper code(s). A response will be provided in writing either approving or denying the adjustment by the reviewing code authority(s).

Also, it is your responsibility to ensure the Cook County Building Department receives copies of the Plan Review Comment Letter and the proper number of copies of fire department stamped drawings and manufacturer’s cut sheets. Once a permit number is obtained, please notify this office.

If there are any questions regarding this matter or any others, please contact our office.

Respectfully,

The North Maine Fire Protection District

Fire Alarm Permit Fees.

Includes two field inspections. Additional inspections are half of the original permit fee. Fire alarm permits expire 180 days from date of issue.

\$200.00	1 – 10 devices
\$250.00	11 – 20 devices
\$300.00	21 – 50 devices
\$350.00	51 – 75 devices
\$400.00	76 – 100 devices
\$500.00	Over 100 devices

Final acceptance/occupancy certification will not be issued by North Maine Fire Protection District until all project fees have been paid in full. Additional fees for non-compliance

Occupancy/Emergency Contact File Information

Date: _____ Business / Complex / Homeowner Name: _____

Address: _____

Management Company: _____

Management Company Address: _____

Business / Office #: (____) _____ Fax #: (____) _____ After Hours #: (____) _____

Management Company / Business Email: _____

Owner / Manager's Name: _____ Email: _____

Address: _____

Home #: (____) _____ Cell #: (____) _____ Key Holder? Yes ___ / No ___

Key Holder / After Hours / Emergency Contacts / Alarm Authorization

Name: _____ Home #: _____ Cell #: _____

Are they authorized to place the alarm out-of-service? Yes ___ / No ___ Are they a key holder? Yes ___ / No ___

Name: _____ Home #: _____ Cell #: _____

Are they authorized to place the alarm out-of-service? Yes ___ / No ___ Are they a key holder? Yes ___ / No ___

Name: _____ Home #: _____ Cell #: _____

Are they authorized to place the alarm out-of-service? Yes ___ / No ___ Are they a key holder? Yes ___ / No ___

Name: _____ Home #: _____ Cell #: _____

Are they authorized to place the alarm out-of-service? Yes ___ / No ___ Are they a key holder? Yes ___ / No ___

Fire Alarm Company _____ Phone #: _____

Address: _____

Business / Office Email: _____ Fax #: (____) _____

Radio Alarm Company _____ Phone #: _____

Address: _____

Business / Office Email: _____ Fax #: (____) _____

Fire Sprinkler Company _____ Phone #: _____

Address: _____

Business / Office #: (____) _____ Fax #: (____) _____ After Hours #: (____) _____

FIRE DEPARTMENT USE ONLY

Fire Alarm Position #: _____ Knox Box Keys Working: Yes ___ / No ___ Need Replacement? Yes ___ / No ___

Occupancy ID: _____ Specific Property Use: _____ (Firehouse Info)

Building Construction Type: I ___ II ___ III ___ IV ___ V ___ Dimensions: _____ X _____

Special Hazards or Other Important Information: _____

Application for Fire Alarm Permit

Date: _____ Name of Applicant/Owner: _____ Email: _____

Address of Project: _____

Name of Contractor: _____ Email: _____

Address of Contractor: _____

Business Phone #: _____ Cell #: _____

Cook County Permit #: _____

- 1) We (I) shall not hold the NMFPD responsible for any malfunction of the sprinkler, fire suppression, or fire alarm system or monitoring equipment, nor for failure of the NMFPD or other fire agencies to respond because of such malfunction.
- 2) We (I) shall ensure the fire alarm and sprinkler/suppression system(s) will be properly installed and maintained, in accordance with NFPA 13, 13D & 13R, 2019 ed., NFPA 72 , 2019 ed., all other adopted NFPA codes, and adopted NMFPD ordinance 2021-0-3 and codes including use of listed equipment and appliances by a nationally recognized listing agency.
- 3) It is agreed by this application in its submission that the NMFPD, upon the issuance of this permit, shall not be liable for any claimed failure of service or such consequential damages claimed to result from the installation or operation of the system(s).
- 4) Further, it is agreed that the NMFPD will be held harmless and saved from any such claim arising during the course of service herein applied for.
- 5) It is understood that all costs for making alterations to the proposed system and maintenance on your premises, and all charges that may be made by others for its service shall be paid by you.
- 6) We (I) understand that noncompliance with any or all of the ordinances and codes adopted by the NMFPD may cause this permit to be suspended or revoked.
- 7) The fee will be in accordance with the above fee schedule and those fees listed in the 2021 NMFPD fire code and shall be made payable to NMFPD. Project location and plan review number shall be printed on form of payment.

Applicant's Name – Printed

Applicant's Signature

FIRE DEPARTMENT USE ONLY

Reviewed with Comment(s) _____

Resubmit _____

North Maine FPD Representative

Date