



LONGMEADOW FIRE DEPARTMENT

44 Williams St
Longmeadow, MA 01106
Office: 413 567-3357 Fax: 413 565-4114



John P. Dearborn, Fire Chief
Emergency Management Director
jdearborn@longmeadow.org

Gerald "Jay" Macsata, Deputy Chief
Deputy Emergency Management Director
gmacsata@longmeadow.org

Captain John Rigney
Captain Dean Godfrey
Captain Michael Nothe
Captain Andrew Markt

Plan review information for new construction or substantial renovation

The following guidance is provided to assist owners, contractors, installers, and design professionals with the plan submittal, review, system installation, and system acceptance processes. The document is not meant to be all-inclusive. All requirements of 780 CMR, 527 CMR, and other applicable codes, standards, and statutes remain in effect.

General requirements:

- All existing fire alarm and sprinkler systems shall be maintained in accordance with these regulations and as prescribed in NFPA 72, NFPA 13, NFPA 13, NFPA 13 R, NFPA 25, the State Building Code, the State Fire Code, and any other applicable codes, standards, regulations, or statutes.
- These rules and regulations shall not be construed as complete but only as a guide. All questions regarding any systems shall be resolved with the Longmeadow Fire Department and Longmeadow Building Department before proceeding with construction
- The authority having jurisdiction for the purpose of this document shall be the Chief of the Fire Department (or designee) and the Longmeadow Building Official (or designee).
- It shall be the responsibility of each engineer, contractor, or installer to familiarize themselves with up-to-date requirements of the Town of Longmeadow and applicable codes, standards, regulations, or statutes.

Engineer/contractor submittal and plan review for fire alarm systems

- All plans shall be submitted either electronically or hard copy. Sufficient plans must be provided for both the Building and Fire Departments.
- All plans shall be drawn to scale with devices accurately located relative to the facility depicted and a graphic scale shall be shown on said plans.

- The Longmeadow Fire Department assumes no responsibility for items omitted on the plans, but required by this document or any other applicable codes.
- All required documentation required by the current Massachusetts adopted version of NFPA 72 shall be submitted.
- A letter on official company stationary, signed and stamped by the design engineer shall accompany the plans. This letter shall state that the plans meet or exceed all applicable State and NFPA codes and standards.

System design and layout

- All systems shall be installed in accordance with NFPA 72 and the State Building Code and by fully supervised as required. Addressable type fire detection and alarm systems shall control and annunciate in English all detectors and control devices at the FACP per NFPA 72.
- All wiring shall be fully compliant with NFPA 72 and the current Massachusetts Electrical Code.
- System monitoring and supervision must be compliant with NFPA 72 and the State Building Code. The Longmeadow Fire Department does not directly monitor alarm systems. Central Station monitoring is most common in Longmeadow. Please contact the Fire Prevention Office for any proposed alternative monitoring or supervision.
- Communication methods for alarm supervision and monitoring must comply with NFPA 72.
- In accordance with NFPA 72, the secondary power supply shall have sufficient capacity to operate the system in a non-alarm condition for a minimum of 24 hours and, at the end of that period, shall be capable to operating all alarm notification appliances used for evacuation or to direct aid to the location of an emergency for 5 minutes.
- Battery backup and voltage drop calculations shall be supplied.
- Upon activation of any device, the fire alarm control panel shall activate all auditory and visual evacuation signals, indicate the zone or address of the initiating device, send an alarm to the monitoring facility, and operate any special devices such as automatic door closures, etc.
 - Carbon monoxide (CO) alarms are to be transmitted to the Longmeadow Fire Department via the monitoring station, but evacuation of the building is not necessary.
 - Duct smoke detectors shall trigger a full evacuation signal in the building and shall be transmitted to the Longmeadow Fire Department via the monitoring station.
- Where smoke detectors are installed in concealed locations more than 10 feet above the finished floor or arrangements where the detector's alarm or supervisory indicator is not visible to responding personnel, the detectors shall be provided with remote alarm or supervisory indication in a location acceptable to the AHJ.

- Smoke detectors shall be covered in place prior to completion of construction. These covers are to be removed prior to system testing.
- Air handling units must be numerically labeled on the roof.
- Air handling units, where visualized from the interior, must be numerically labeled.
- A remote annunciator may be required based upon the building or placement of the fire alarm control panel. Consult the Fire Prevention office for applicability to a specific project.
- In the event that a building has a fire pump or generator, provisions shall be made at the remote annunciator for visible indication of generator/fire pump operation.

Sprinkler and standpipe systems

- All sprinkler systems shall be monitored and shall activate an alarm system installed in the building in accordance with the State Building Code.
- Inspections, testing, and maintenance shall be in accordance with NFPA 25
- All sprinkler risers shall have water flow alarms attached.
- All devices shall be listed and approved for the function they are performing
- Fire Department Connections shall use a 4 inch Storz connection to the sprinkler system. A 30 degree elbow shall be installed if over 30 inches from the finished grade.
- If sprinkler control valves are located in a separate room or concealed space, a sign shall be provided on the entrance door, with letters at least (4) inches in height, indicating their presence.
- Exterior notification appliances shall be in accordance with the State Building Code, NFPA 72, and NFPA 13. The location shall be subject to approval by the Longmeadow Fire Department.

Fire department access

- Fire Department access roads shall be provided when required and specified by the State Fire Code.
- Access roads must have an unobstructed width of at least 20 feet and 13 feet, 6 inches in height.
- The minimum inside turning radius is 25 feet. State Fire Code allows the AHJ to increase the minimum turning radius to their apparatus. Please contact the Fire Prevention Office for Longmeadow apparatus specifications.
- Any commercial, industrial, or residential type building with an interior fire alarm or sprinkler system should have a Knox key safe installed at a location specified by the Longmeadow Fire Department.

Final inspections

- Acceptance testing shall be scheduled so all municipal inspectors required are able to attend. At minimum, a representative of the fire department and the Building Official must be present.
- In a case where multiple systems require acceptance testing, every effort shall be made to test systems simultaneously.
- It shall be the installer's responsibility to supply sufficient personnel to perform all aspects of the test. Fire department personnel are present only to witness the test.
- The installer shall provide a mechanism for performing a "true function" test of each device. This means that all smoke detectors shall be tested by some means to show sensitivity.
- Upon acceptance of a system by the Longmeadow Fire Department, the owner of the building shall maintain the system in 100% operating condition at all times.
- All required affidavits per NFPA regulations shall be available for signing by the Fire Department at the time of the acceptance test.

Acceptance testing checklist

Commercial fire alarm

- Final contractor's inspection test report
- Copy of completed and signed Construction control affidavit
- Complete test report from monitoring company
- Knox Box installed with proper keys labeled
- Fire alarm devices properly labeled
- Remote indicators for devices in concealed locations
- Air handling units must be numerically labeled on roof
- Air handling units, when visualized from the interior, must be numerically labeled
- Ducts smoke detectors cause full alarm activation and shut down units
- Carbon monoxide detectors transmit to the Fire Department via monitoring
- NFPA certificates and affidavits

Sprinkler system

- Test report
- Valves labeled
- Flow valves trip alarm no greater than 45 seconds
- Spare sprinklers and wrench provided in cabinet
- Contractor's material and test certificate for underground piping form received, filled out, and signed.
- Contractor's material and test certificate for aboveground piping form received, filled out, and signed
- Hydraulic design information provided at valve.

Ansul system test report for commercial kitchens

- Air test of the system with shutdown of gas appliances and all electrical outlets under the hood
- Carbon monoxide detector test
- Activation of the Ansul system activates fire alarm system and sends signal to the Fire Department via monitoring station.
- K-type fire extinguisher mounted and sign conspicuously placed near each extinguisher that states the fire protection system shall be activated prior to using the fire extinguisher.