

# **LACONIA FIRE DEPARTMENT FIRE ALARM DESIGN SUBMITTALS REQUIREMENTS**

**Effective January 1, 2024**

Fire alarm systems shall be installed when required by codes, ordinances, insurance company requirements, or by the request of the property owner.

To provide guidance to those specifying the design of such systems to be installed in the City of Laconia, NH, the following shall apply:

The standards that will govern the design of these systems shall be as follows:

Most recent editions adopted by the State of New Hampshire

- NFPA 72: Fire Alarm Code
- NFPA 1 Uniform Fire Code
- NFPA 101
- International Building Code
- Laconia City Ordinances

A statement as to the scope of work shall be submitted with the plans and specifications. This statement shall detail the proposed type of alarm system (i.e. manual evacuation, total automatic detection, etc.) its mode of operation (alarm sequence) and explanation of wiring classes, styles and components, including specification detail sheets.

\*The Authority Having Jurisdiction reserves the right to increase or add to the above standards if in the opinion of the Authority Having Jurisdiction this becomes necessary for adequate fire protection.

The following information will be a necessary part of submittal (can be sent as pdf file):

- Plans must be drawn to scale
- A floor plan showing: (2 sets)
  - a. connected and non-connected detection devices
  - b. evacuation signal devices
  - c. panel location
  - d. annunciator location(s) (if required)
  - e. master box location (if required)
  - f. Knox® box location(s)
  - g. the proposed use of the building
  - h. riser diagram indicating device circuits and EOL devices
- A site plan showing the location of fire alarm enclosures, FACP and master boxes where remotely located from the building.
- A one-line wiring diagram including sprinkler flow and tamper switch connections. (1 set)

- Commercial building fire alarm plans shall be reviewed, approved, signed and sealed by a NH Licensed Professional Engineer. Single-family residential fire alarm plans, where required, must be certified by a UL or FM approved fire alarm contractor.
- In commercial buildings, where the FACP is not visible from the street, a full function fire alarm annunciator shall be provided at the main entrance.
- An annunciator detail showing zone labeling.
- Battery calculation sheets showing a minimum of 60 hour stand-by and 5 minute alarm at +40°F (1 set)
- A set of plans indicating fire official approval shall be available at the job site until after completion of the required acceptance test.

No formal plan review will occur without the completion of an application for a Fire Alarm Permit. The applicant must obtain this permit at:

**Laconia Fire Department  
Fire Prevention Division  
848 North Main Street  
Laconia, NH 03246**

No work is to begin prior to receiving a formal approval from the Laconia Fire Department.

Rough-in inspections or all wiring is required **PRIOR** to closing walls and ceilings.

Final acceptance tests are required. The alarm contractor shall complete and submit to the Laconia Fire Department, a full fire alarm test report prior to scheduling the final acceptance inspection. A copy of the contractor acceptance report must be provided to the Laconia Fire Department at the time of (or before) the final acceptance inspection.

As-Built plans for completed fire alarm systems shall be available during the final acceptance inspections and shall be submitted to the Laconia Fire Department at the conclusion of the final acceptance inspection, and shall include:

- Location of all device locations as installed.
- Riser diagram, as installed
- A site plan showing all underground cable, conduit, wire type and pipe dimensions for location at a future date.
- Any devices or drawing changes from the approved submittal package must be authorized by the Laconia Fire Department.
- All plans and system installation shall comply with all applicable Codes, standards and regulations.

