



3.0 Fire Alarm System Submittal Requirements

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Requirements:

Construction permits are required for installation of or modification to fire alarm systems and shall be submitted for review and approved prior to work commencing.

Construction documents for fire alarm systems shall be of sufficient clarity to indicate the location, nature and extent of the work purposed and show in detail that it will conform to the provisions North Carolina Fire Prevention Code and NFPA 72

A minimum of the following information must be submitted:

1. A completed Town of Southern Pines Fire permit application.
2. A detailed written scope of the work to be performed.
3. A scaled and detailed drawing with the system designer indicated and the date of design.
4. Fire Alarm Shop Drawings must be sealed by a Professional Engineer. Shop drawings that are identical to submitted engineered drawings will not be required to be sealed, if the shop drawings change from the original design, the shop drawings must be sealed by a Professional Engineer.
5. Fire alarm drawings shall be submitted through SmartGov. Fire Alarm drawings shall be submitted for review to secure a Fire Alarm and Low Voltage permit.
6. Permits must be obtained prior to any construction or installation of the system.

Fire alarm shop drawings. Shop drawings for fire alarm systems shall be submitted for review and approval prior to system installation, and shall include, but not be limited to, all of the following:

1. A floor plan that indicates the use of all rooms.
2. Locations of alarm-initiating devices.
3. Locations of alarm notification appliances, including candela ratings for visible alarm notification appliances.
4. Design minimum audibility level for occupant notification
5. Location of fire alarm control unit, transponders and notification power supplies.
6. Annunciators.
7. Power connection.
8. Battery calculations.
9. Conductor type and sizes.
10. Voltage drop calculations.
11. Manufacturers' data sheets indicating model numbers and listing information for equipment, devices, and materials.
12. Details of ceiling height and construction.
13. The interface of fire safety control functions.
14. Classification of the supervising station.

The fire alarm system shall comply with applicable provisions of the NC Building Code, NFPA 70 - National Electrical Code (NEC), NC Fire Code, and NFPA 72 -National Fire Alarm and Signaling Code
Additional information may be required prior to approval of the submitted plans. The above-requested information is not all-inclusive.

Definitions:

- **Maintenance** shall be defined as the periodic testing, cleaning, adjustment, and operation required to ensure that the system will operate as specified in the North Carolina Fire Prevention Code and NFPA 72.
- **Repair and replacement** shall be defined as the necessary corrections to achieve compliance as specified in the referenced standards.
- **Like-for-Like Replacement.** Replacing a device or alarm panel with the same model number, manufactured by the same manufacturer. In the case of a model being discontinued, use the model identified as a replacement for the previous model by the same manufacturer (ex. Fire lite MMX-1 replaces Fire lite MMX). Where a replacement model is not available, and then a suitable device can be selected from the FACP equipment manufacturer’s compatibility list in the installation manual.

Like-for-Like Replacement may require permits depending on the extent of the changes.

Example: 1. Changing the FACP with the same model will require a permit.

2. Changing a smoke detector or horn strobe for the same model would not require a permit.

Always check with the Fire Code Official before you make changes to a fire alarm system.

- **Additions, alterations, repairs, rehabilitations or changes of occupancy** shall be permitted to any existing structure or service system without requiring the existing systems to comply with all requirements of the current technical codes. All new work shall conform to the requirements of the current technical codes for new construction. For any portion of an existing building or service system which creates a hazard or unsafe condition, the Code Enforcement Official shall determine the extent to which that portion of the existing building or service system is to be upgraded to conform to the requirements of either the Existing Building Code or the technical codes

Any replacement where permits are not required will still require testing of new devices, panels, or communicators.

Required Inspections

The following inspections are minimum required during the project. Failure to call for an inspection may result in delays or require covered work to be uncovered for visual inspections:

- Rough-in inspection to be completed before wiring or wiring methods is concealed.
- Overhead inspections to be completed before the installation of ceiling tiles or ceiling system.
- Final Inspection to include: verification of device placement, functional test of system, response time test, a review of contractors 100% self-inspection documentation.