

# OKLAHOMA CITY FIRE DEPARTMENT Fire Marshal's Office Interpretation

Interpretation #:	Subject of Interpretation:	
OKCAHJ-2018-04	Fire Protection Systems Plan Submittal	
Code Reference: 2009 IFC Section 901.2 and 901.5; NFPA 25, Table 5.5.1; NFPA 72; NFPA 13		
Reviewed By:	Title:	Effective Date:
Robert Crisp	Assistant Fire Marshal	6/1/2018
Approved By:	Title:	<b>Revision Date:</b>
Harold Thompson	Fire Marshal	N/A

## **Purpose:**

The purpose of this policy is to provide clarification and consistency in the requirements for permitting of any fire alarm or sprinkler system, including those that has been altered, remodeled or extended.

## **Description of Code Reference:**

2009 IFC Section 901.2 states, "the *fire code official* shall have the authority to require *construction documents* and calculations for all *fire protection systems* and to require permits be issued for the installation, rehabilitation or modification of any *fire protection system*. *Construction documents* for *fire protection systems* shall be submitted for review and approval prior to system installation."

# Policy based on the Interpretation of the Authority Having Jurisdiction (AHJ):

The current policy of the Fire Marshal's office allows for an "8 devices or less permit" for the alteration to an existing system and the addition of up to 8 devices. This revised policy will change that number to the alteration and/or addition of 20 or less devices with specific system requirements prior to acceptance tests and final inspection. The following policy requirements apply to the permitting of fire alarm or sprinkler systems, to include systems affecting 20 or less devices.

## Fire Alarm System Plan Submittal Requirements:

Construction documents for fire alarm systems shall be submitted for review and approval prior to system installation. Submittals shall be made in accordance with Section 907.1 of the International Fire Code (IFC). Systems shall be designed and installed in accordance with the latest edition of NFPA 72.

1. The fire alarm submittal shall include battery calculations, sequence of operations, notification appliance circuit voltage drop calculations, wiring diagram showing the connection between new and existing systems , and, if utilizing ceiling mounted strobes, the appropriate ceiling heights, as required in NFPA 72.

2. Submittals shall be drawn to scale and indicate the nature and character of the proposed work. Submittals shall include the identification and location of all control unit equipment (i.e., equipment listed as either a control unit or control unit accessory), power supplies, battery chargers, and annunciators.

## INTERP-2018-04 FIRE PROTECTION SYSTEMS PLAN SUBMITTAL 6/1/2018

3. Fire alarm system plans and specifications shall be developed in accordance with NFPA 72 by persons who are experienced in the proper design, application, installation, and testing of fire alarm systems. All submittals shall be reviewed by a NICET Level III or Level IV, or by a Professional Engineer.

**Revised Policy (Fire Alarms):** For the alteration or additions to an existing alarm system affecting 20 or less devices (including additions and modifications) the permit request shall include sufficient detail to indicate the location, nature and character of the proposed work. Full detail plans and calculations will not be required. Multiple permits in any annual period shall be cumulative for the use of this exception.

## Fire Sprinkler System Plan Submittal Requirements:

Construction documents for fire sprinkler systems shall be submitted for review and approval prior to system installation. Submittals shall be made in accordance with Section 903.1 of the International Fire Code (IFC). Systems shall be designed and installed in accordance with NFPA 13.

1. The sprinkler submittal shall include hydraulic calculations including a flow test dated within the last 12 months, description of hazard, manufacturer's specifications.

2. Submittals shall be drawn or a narrative description with sufficient clarity and detail to indicate the nature and character of the work. Drawings should be of a sprinkler system only, not combination drawings with plumbing, mechanical, etc., unless those systems are critical to the sprinkler system design.

3. Systems shall be designed and installed in accordance with the appropriate NFPA standard (13, 13D, or 13R). All submittals shall be reviewed by a NICET Level III or Level IV, or preferably by a Professional Engineer.

**Revised Policy (Sprinkler Systems):** For the alteration or additions to an existing sprinkler system affecting 20 or less sprinklers (including additions and modifications) the permit request shall include sufficient detail to indicate the location, nature and character of the proposed work. Full detail plans and calculations will not be required. Multiple permits in any annual period shall be cumulative for the use of this exception.

**Inspection Note:** Modifications affecting <u>20 or less sprinklers</u> (including additions and modifications) shall not require testing in excess of system working pressure; however, documentation relating to completed system operational tests (including water flow, control valves, main drain valve, etc...) will be required upon fire final inspection. According to NFPA 13, Section 25.2.1.5, where addition or modification is made to an existing system affecting <u>more than 20 sprinklers</u>, the new portion shall be isolated and tested at not less than 200 psi (13.8 bar) for 2 hours.