



SUPPLEMENTAL RULES & REGULATIONS

Number:	12-907		
Subject:	Fire Alarms		
Code:	2012 International Fire Code	Code Section:	907
Effective Date:	12/7/2013	Revision Date:	N/A
Issued By:	Dan DuBois <i>Dan DuBois</i>		

SCOPE:

To clarify the intent of Section 907 and establish rules and regulations regarding requirements for the installation of fire alarms and appliances.

GENERAL:

Fire Alarm References:

2012 IFC, 2012 IBC, 2012 IMC, 2011 NEC, 2010 NFPA 72, and the Town of Gilbert amended code.

Fire Alarm Plan Submittal:

All Fire Protection System sheets in Plan sets must be sealed by a Registered Professional Engineer (PE) licensed by the State of Arizona in accordance with Arizona Board of Technical Registration (BTR) "Substantive Policy #3 FIRE SPRINKLERS AND FIRE ALARM SYSTEMS" PE activities http://www.btr.state.az.us/regulations/substantive_policy.asp Shop/Installation drawings not requiring a Professional Engineer's seal shall be designed by a minimum NICET III. All sheets shall have a title block with complete contractor and designer information including: name, address, phone number and valid Arizona Contractors License number. Sprinkler monitoring systems only and their associated supervisory functions are acceptable to be designed by NICET II.

- Three sets of fire alarm plans including cut-sheets of all system components are required to be submitted for plan review. Permit applications will not be accepted with less than 3 complete plan sets.
- Plans shall include specifications, type of system or service, shop drawings, site plan, input/output matrix, battery calculations, and notification appliance circuit voltage drop calculations.
- Systems or changes with fewer than five devices may be submitted on an 8 ½ X 11. Submittal must be in font size 10 or larger.



- Plan submittals for access-controlled egress doors or delayed egress locks are required by the installing contractor and shall follow the design and installation requirements of the 2012 IFC and 72 NFPA 2010 Edition.

Fire Alarm Requirements for Non-separated Mixed Occupancies:

Non-separated Mixed Occupancies (IBC 508.3). Occupancies that depend on occupant load criteria to determine when a fire alarm system is required shall use the total building occupant load using the most restrictive occupancy classification and extend the fire alarm system to all occupied areas of that building in accordance with applicable code and standard. The fire alarm requirements shall be based on the most restrictive fire protection system requirement of IFC Chapter 9.

Fire Sprinkler Monitoring of Flow Switches & Tampered Control Valves:

Flow switches & tampered control valves on fire sprinkler systems that are required to be monitored (20 or more heads) shall be connected to the fire alarm control panel & indicate floor and/or area.

Protection of Fire Alarm Control Units (Panels):

Automatic smoke detection shall be provided at the location of each fire alarm control unit to provide notification of fire at that location. Fire Alarm Control Units shall be connected to a dedicated branch circuit of the building power service.

Duct Smoke Detectors:

Duct smoke detectors shall be installed in accordance with IFC 907.3, IMC 606, and 72 NFPA 17.7. Where in-duct smoke detectors are installed in concealed locations or in arrangements where the detector's supervisory indicator is not readily visible to responding personnel, the detectors shall be provided with remote supervisory indicators installed below the in-duct smoke detector(s) at ceiling level where applicable. This requirement shall be applied to both addressable and non-addressable fire alarm systems. Access doors and appropriate signage shall be provided where necessary.

Inspection Report of HVAC Automatic Shut-Offs and Smoke Dampers:

These reports are not required unless specifically requested by the fire inspector for all new installations of smoke detectors associated with smoke dampers and HVAC shut-offs. When requested they are to be tested by the professional engineer of record, or an approved testing agency or a qualified third party special inspector. The testing agency or qualified third party special inspector shall be an approved independent third party individual or firm and shall not be the installing contractor. The final report is to be submitted to the fire inspector and shall be signed, sealed (wet) and dated prior to certificate of occupancy.



Elevator Hoist-Ways & Machine Rooms:

Actuation from elevator hoist-way and elevator machine room smoke detectors and other automatic fire detection shall cause a separate and distinct visible annunciation at the control unit (FACP) and required annunciators to alert fire fighters and other emergency personnel that the elevators are no longer safe to use. Actuation of the elevator hoist-way and elevator machine room smoke detectors shall initiate a supervisory signal.