



## Fire Alarm Systems, Non-Residential & Multi-Family

The rules for changing, installing, repairing, or replacing fire alarm systems in non-residential and multi-family residential buildings aims to provide early warning in case of a fire or other life safety event. Fire alarm systems must follow the International Fire Code (IFC) 2021 edition, as amended. The system must be designed and installed per National Fire Protection Association (NFPA) 72, 2019 edition.

Apply On-Line at [MyBuildingPermit.com](https://www.kingcounty.gov/MyBuildingPermit.com)

Select: King County | Fire | (Project Type)  
| (Activity Type) | Fire Alarm



### Requirements for Non-Residential and Multi-family Properties:

Non-residential and multi-family structures must have an automatic fire alarm system in the following conditions:

1. New buildings and structures where required per IFC 2021 §907.2.1 through §907.2.23 and occupant notification according to IFC 2021 §907.05.
2. Tenant improvements in new and existing structures might need a fire alarm system as outlined in Chapter 9 §907 of the International Building & Fire Codes, 2021 editions.
3. Places with an occupant load of 1,000 or more need voice evacuation systems per IFC 2021 §907.2.1.1.

### Non-Residential and Multi-family Fire Alarm System Requirements:

Fire alarm systems must be designed by a NICET Level III Fire Alarm Designer or a Washington State licensed engineer and installed per the NFPA 72, 2019 edition. You need to apply for a King County Fire Alarm System Permit before finalizing the building permit.

### Required Documentation for Fire Alarm Plan Cover Sheet:

1. Name of designer and NICET III certificate number or Washington State licensed engineer stamp.
2. Written narrative providing intent and system description.
3. Name of protected premises, owner, and occupancy type.
4. Installation contractor's name and Washington State contractor licenses number.

## Fire Alarm Systems, Non-Residential and Multi-Family, (continued)

### Drawing requirements to include on Fire Alarm Plans:

1. Device legend and symbols per NFPA 170, 2018 edition, or other symbols acceptable to King County.
2. Current equipment technical data sheets for all proposed equipment in the design.
3. Battery calculations.
4. Voltage drop/load calculations for notification appliance circuits.
5. Electrical riser diagram.
6. Type and quantity of conductors for each circuit.
7. Sequence of operation input/output matrix.
8. Point of compass (indication of North).

### Minimum Design Details to be shown on plan sheets:

1. Floor plan drawings must identify location of all system devices and control equipment.
2. Electronically submitted drawings need to comply with [MyBuildingPermit.com standards \(see: Electronic Plan Requirements\)](#).
3. Identification of any ceiling over 10 ft. in height *where automatic fire detection is proposed*.
4. Details of ceiling geometries, including beams and solid joists, *where automatic fire detection is being proposed*.
5. Building cross-sections detailing beams, purlins, obstructions, ceiling heights and slopes.
6. All walls and doors.
7. Room descriptions and room numbers.
8. Locations of fire alarm remote power supplies, main panels, and remote annunciators.
9. Locations of fire alarm primary power disconnecting means.
10. Voice evacuation systems application, installation, and performance shall be per NFPA 72, Chapter 24, 2019 edition.
11. Survivability of system circuits and equipment, when applicable.
12. Location of monitoring transmitter. *Note: if equipment is not in the same room as the Fire Alarm Control Panel (FACP), early warning fire detection must be installed per NFPA 72, §10.4.5, 2019 edition.*
13. Central station to be used.

### Documentation of Fire Alarm Completion:

1. Before requesting final Fire Marshal Inspection of the installation, provide "System Record of Completion" form per the NFPA 72, §7.8.2, 2019 edition.
2. Certification of central station service must be in accordance with NFPA 72 §26.3.4, 2019 edition.

## Fire Alarm Systems, Non-Residential and Multi-Family, *(continued)*

### Obtaining a Non-Residential or Multi-family Fire Alarm Permit:

Go to [MyBuildingPermit.com](https://www.kingcounty.gov/permits). The permit type selections are as follows in the box below

**Apply On-Line** at [MyBuildingPermit.com](https://www.kingcounty.gov/permits)

**Select:** King County (Jurisdiction) | Fire (Application Type) | Non-Residential OR Multi-family (Project Type) | (Choose one Activity Type) | Fire Alarm Systems (Scope of Work)



If you have questions or would like to inquire about alternatives, please email [fmo.dper@kingcounty.gov](mailto:fmo.dper@kingcounty.gov).

### Additional Resources:

King County [Department of Local Services, Permitting Division](https://www.kingcounty.gov/permits) ([www.kingcounty.gov/permits](https://www.kingcounty.gov/permits))

- [Location and office hours](#)
- [Check permit status, make a payment \(see permit fees\), and schedule inspections](#)
- [Other permits we offer in unincorporated King County](#)