



Fire Alarm Systems, Non-Residential & Multi-Family

The requirement for alteration, new installation, repair, or replacement of non-residential and multi-family residential fire alarm systems is intended to provide early warning to the occupants of a fire or other life safety event. An approved fire alarm system shall be installed in accordance with International Fire Code (IFC) 2021 edition, as amended, and designed / installed per National Fire Protection Association (NFPA) 72, 2019 edition.

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

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

 MyBuildingPermit

Requirements for Non-Residential and Multi-family Properties

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

- A. Within new buildings and structures in accordance with Sections §907.2.1 through §907.2.23 and provide occupant notification in accordance with Section 907.05. [IFC 2021 §907.2]
- B. Tenant improvements within new and existing structures may require the installation of a fire alarm system as outlined in Chapter 9 §907 of the International Building & Fire Codes, 2021 editions.
- C. Assembly uses with an occupant load of 1,000 or more require voice evacuation systems. [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 in accordance with the NFPA 72, 2019 edition. A King County Fire Alarm System Permit shall be applied for prior to finalization of the building permit.

Non-Residential and Multi-family Fire Alarm System Submittal Requirements

Required Documentation for Fire Alarm Plan Coversheet

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 occupant type.
4. Name and Washington State contractor licenses number of installation contractor

Fire Alarm Systems, Non-residential and Multi-family, continued

Drawing requirements to be provided on Fire Alarm Plans

1. Device legend and symbols in accordance with NFPA 170, 2018 edition, or other symbols acceptable to the authority having jurisdiction.
2. Current equipment technical data sheets for all proposed 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 shall identify location of all system devices and control equipment.
2. Electronically submitted drawings shall comply with [MyBuildingPermit.com standards](https://www.kingcounty.gov/permitting/MyBuildingPermit.com).
3. Identification of any ceiling over 10 ft. in height *where automatic fire detection is being 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, 2019 edition, Chapter 24.
11. Survivability of system circuits and equipment, when applicable.
12. Location of monitoring transmitter. *Note: if equipment is not located within the same room as the FACP, early warning fire detection shall be installed. 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 in accordance with NFPA 72, § 7.8.2, 2019 edition.
2. Documentation of central station service shall 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/MyBuildingPermit.com). The permit type selections are:

Jurisdiction: King County

Application Type: Fire

*Project Type: Non-Residential **OR** Multifamily*

Activity Type: (Choose one)

Scope of Work: Fire Alarm

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

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



If you have questions or would like to inquire about alternatives, please email fmo.dper@kingcounty.gov.

Additional Resources

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

[Permit Fees](#)

[Location and office hours](#)

[King County Green Building Handbook](#)

