



Fire Alarm Permit Application



Redmond
WASHINGTON

redmond.gov/Prevention

Updated Feb. 1, 2021 to the 2018 International Fire Code

APPLICANT INFORMATION

New systems or significant alterations: The applicant must be both a qualified alarm contractor and the prime contractor for the system. New systems / significant alterations may require upgrades to meet current codes and standards. The Fire Code Official (FCO) may determine an alarm alteration to be significant.

Modifications: The applicant must be the prime contractor unless approved by a fire code official. Written authorization from the prime contractor will be required.

A fire alarm permit submittal includes plan review (if required) and two inspections per inspection type. Additional inspections are subject to reinspection fees. After-hour plans reviews and after-hour inspections may also be requested but are subject to after-hours fees and reviewer/inspector availability. Please see the Redmond Fire Department fee schedule for additional details.

APPLICANT INFORMATION

Name: _____
 Company Name: _____
 Company Certification (UL, FM, ETL Number): _____
 Mailing Address: _____
 City, State, Zip: _____
 Phone: _____
 Email Address: _____

Office Use Only

FIRE-20 _____
 ACCEPTED BY: _____ DATE: _____

TYPE OF PERMIT

Standard submittal

- New system or significant alteration
- Modification to existing system (over 25 devices or includes a FACU or transmitter)

Quick start (Up to 25 devices with no transmitter, no FACU, no special systems):

Apply on the [Redmond ePermitting System](http://www.redmond.gov/REPS)
 (www.redmond.gov/REPS)

CONTRACTOR INFORMATION

Contact Person: _____
 Company Name: _____
 Mailing Address: _____
 City, State, Zip: _____
 Phone: _____
 Email Address: _____
 State Contractors License #: _____
 Expiration Date: _____
 Redmond Business License #: RED _____

SITE INFORMATION

Site Address: _____
 Project Name/Tenant: _____
 Associated Permits: ELEC-20 _____
 (if applicable) BLDG-20 _____
 Property Owner: _____
 Proof of valid Central Station Service via FAOP required.
New systems: FAOP Required at final.
 Prime Contractor: _____
 FAOP Number: _____ Expiration Date: _____

DESCRIPTION OF WORK

FIRE ALARM DESIGNER

Per WAC Requirements the fire alarm designer must hold at least one of the following: **1)** NICET level III, **2)** ESA/NTS CFAD Level III, **3)** WA License as a Professional Engineer. The designer's signature and certification shall be on all pages. Designer must be part of RFDS 9.0 and NFPA 72 26.3 compliant contractual arrangement.

Designer: _____ Email Address: _____
Company Name: _____ Phone: _____
Mailing Address: _____ NICET Certification #: _____
City, State, Zip: _____ Level III Level IV

SCOPE OF WORK & FEE INFORMATION

Provide device counts for all fire alarm components being installed, moved, or removed. Fees will be based on the total number of devices, with control panels, transmitters and power supplies billed separately. Please see the current Redmond Fire Department fee schedule for details.

- Fire Alarm Control Unit.** Only one main FACU/FACP allowed per building.
Alarm sub-panels (e.g. VESDA or clean agent sub panels) may be feed as an additional FACU. Replacing or modifying cards or components of a FACU (or a transmitter) may be treated as replacing the entire device. FACU upgrades may require system upgrades to meet current code, as per FCO.
- Transmitter.** Only one per building and each building must have its own transmitter. The transmitter must be included in the scope for a new system or significant modification, though it may be installed by an authorized and qualified sub-contractor.
 Cellular Radio (AES) Other (requires prior FCO Approval)
- Power sub-panel.** There is a fee per power supply, power sub panel, or NAC panel. Do not include these power supplies in the below device count.
Number of power supplies: _____

Indicate the number of each type of device:

- | | |
|--|---|
| ___ Secondary control panels (sub panels such as for VESDA or clean agent are feed as FACUs, not secondary panels) | ___ Line-type detectors, per continuous line |
| ___ Visual notification devices | ___ Magnetic hold-open devices |
| ___ Audible notification devices | ___ Air aspirating-type detector, e.g., a VESDA system (count each pipe as a device, panel as a FACU) |
| ___ Combination audio/visual notification devices | ___ Relays or monitoring modules, e.g. for commercial cooking hoods, heat trace, ERRS/DAS |
| ___ Cards or modules such as DACT, SDACT, IntelliTap | ___ Spot detectors * |
| ___ Detection devices such as smokes or heats | ___ Manual initiating devices * |
| ___ Remote annunciators | ___ Other devices (an alarm device not otherwise defined, or as per the FCO) |
| ___ Tamper switches | |
| ___ High/low pressure indicator switches | |
| ___ Supervisory switches | |

** If only a fire alarm control panel is replaced and the addition of an automatic smoke detection device and a manual initiating device are required, these devices shall not count for the purpose of calculating plan review and permit fees.*

Total Device Count : _____

Device count does not include FACU, transmitter or power sub-panels.

ELECTRONIC PLAN STANDARDS

File Naming Standards:

Electronic plans and documents shall be named as specified in **bold type** under the submittal checklist. For example, the plans must be named "**Plans**".

Acceptable File Types:

Plans, calculations, specifications, and supporting documents shall be uploaded as PDF files.

Plan Sheet Standards:

All plans shall be drawn to scale, as identified in the checklist, and each sheet shall state the scale.

Document Orientation:

All plans must be uploaded in **landscape** orientation. All other documents can be in portrait format.

QUICK START PERMITS

A quick start permit may be obtained for the installation or modification of **25 field devices or fewer** on fire alarm systems that have a current FAOP and **do not involve a fire alarm control panel, transmitter or special system**. Quick start permit applications must be submitted via the Redmond ePermitting System (REPS) at www.redmond.gov/REPS.

SUBMITTAL CHECKLIST

The following items are required at the time of application for fire any fire alarm permit that does not qualify as a quick start. This would include any alarm work involving the installation of new systems, or modifying existing systems. In addition to the below checklist, any item listed in NFPA 72 7.1 may be required before a permit is accepted for review as per the FCO. **Note:** Submittals must include all items identified in the Redmond Fire Department Standards (RFDS). Failure to provide any necessary information may result in rejection of your application.

- Completed permit **application**
- Central Station Service** (must comply with NFPA 72 26.3.3)
 - If a new system, provide proof of **prime contractor's qualification** (UUFX-tier UL listing or ETL/FM equivalent). FAOP required before approval of the fire alarm final.
 - If modifying a system, include a copy of the fire alarm system's current valid **FAOP**.
 - If the applicant for the system modification is not the prime contractor listed in the above current certificate, a **letter of authorization** from the prime contractor must be included.
- Complete NFPA 72 compliant **plans**:
 - A site plan with a scale no smaller than 1": 50' showing the area surrounding the building worked on
 - Cover sheet must indicate compliant Central Station Service arrangement showing company responsible for: 1) Acting as Prime Contractor; 2) Monitoring, retransmission of signals; 3) Record keeping and reporting; 4) Installation; 5) Testing and maintenance; 6) Runner service
- Shop drawings at 1/8" = 1' 0" showing the scope of work with devices, wiring, end-of-lines, etc.
- Complete sequence of operations (input/output matrix) with input signals grouped by RFDS 9.0 signal types (alarm, waterflow, supervisory, trouble, special system).
- Code summary indicating the codes and standards used. Make note of devices that are required and any devices being added that are not required by code. Voluntary equipment must be installed as if required.
- Set of manufacturer **cut sheets** on all equipment (clearly mark the specific model of equipment used).
- Battery calculations and voltage drop calculations for each indicating device circuit.
- When scope of work includes riser wiring, a riser diagram is required, include the listing of the wire and fire resistance ratings of raceways and risers.
- For new systems or significant system alterations, provide a **Building Information Card** (formerly Zone Map). This is floor plan showing all initiating devices, alarm panels, annunciators, and any other important fire service features. It shall also include a copy of the sequence of operations with inputs grouped by signal type. The BIC will be posted by the FACU before fire final. If the shop drawings allow a layperson to quickly identify and locate initiating devices then it may double as the BIC floor plan. If not, a separate floor plan with wiring and A/V devices removed may be required.

ATTESTATION

The applicant is required to sign this application verifying that this fire alarm permit submittal is in accordance with all applicable codes and standards. The following highlights major requirements but *is not* a comprehensive list of what is necessary.

General Requirements

- See Redmond Fire Department Standard 9.0 on alarms as well as the current adopted code year of the IFC and NFPA 72 for alarm system codes, standards and guidelines.
- Fire alarm systems are required in all new buildings and structures where there is a required sprinkler system, except in one- and two-family dwellings as defined in the International Residential Code. (Redmond Municipal Code 15.06.013)
- Each building may have only one approved panel and transmitter per building. Transmitters may use a cell or radio, as listed in Redmond Fire Department Standard 9.0.
- The 2021 update to RFSD 9.0 has new information modes of work, when permits are required, design requirements, signal types and signal programming, modifying existing non-conforming systems and acceptance testing.
- See Per RFDS 15.0, preventable fire alarms resulting from the installation or testing of an alarm system may incur fees.

Contractor Requirements

All fire alarm systems in the City of Redmond must be designed, installed, maintained, and monitored per the requirements in NFPA 72, 26.3 Central Station Service. This includes the following:

- One qualified prime contractor must be identified for each fire alarm system. The prime contractor shall:
 - ◆ Hold a UUFX (central-station protective signaling service) listing from UL or an equivalent from FM or Intertek/ETL.
 - ◆ Provide central station service using one of the four listed models.
 - ◆ Be contractually responsible for providing compliant service for the six required elements: 1) Installation of alarm transmitters 2) Alarm, supervisory, and trouble signal monitoring 3) Retransmission 4) Associated record keeping and reporting 5) Testing and maintenance 6) Runner service
 - ◆ As per RFDS 9.0, in addition to the NFPA 72 definitions of "*Runner*" and "*Runner Service*", in the City of Redmond *runner service* must be provided by a listed alarm company by UL, FM or Intertek/ETL and provide *runners* who are qualified to perform the required duties at a protected premises. Compliant *runner service* must be capable of 24/7 availability of a *runner* able to arrive at a premise within two hours. *Runners* must respond to supervisory and trouble signals as well as when requested by a *FCO* or an on site responding fire crew.
- The monitoring of the system shall conform to NFPA 72 26.3.8.1, including retransmitting alarms to NORCOM within 90 seconds
- All design, installation, maintenance and monitoring of the system shall be the responsibility of the prime contractor or a qualified party authorized by the prime contractor and allowed by NFPA 72 26.3.
- Testing/maintenance: All inspection, testing, maintenance and programming not defined as "electrical construction trade" by chapter 19.28 RCW shall be completed by a NICET II or ESA/NTS Certified Fire Alarm Technician (CFAT) Level II Fire.
- Design review: All construction documents shall be reviewed by a NICET III, an ESA/NTS Certified Fire Alarm Designer (CFAD) Level III Fire in fire alarms, or a licensed professional engineer (PE) in Washington.

Permit Submittal Requirements

- Quick start alarm permits may not include more than 25 devices, transmitters, FACUs, or special systems (for example pre-action, VESDA, clean agent).
- New or Significant Alterations involving FACU replacement may require upgrades to the fire alarm system to meet current codes and standards.
- **Building Information Card (BIC).** Formerly known as a Zone Map, the *BIC* is a floor plan with an operational matrix showing inputs and outputs grouped by alarm signal type. A *BIC* will be posted at time of fire alarm final for the use of fire crews and future fire alarm maintenance. Permit submittals for new systems or significant changes shall include a *new or updated BIC* that must be posted by adjacent to the *FACU* before final alarm inspection. Each page of the *BIC* must be labeled as such and the *BIC* must include two items:
 - **BIC Floor Plan.** This shows the building layout and locations of all initiating devices and alarm/annunciating panels for the purposes of quickly identifying the location of initiating devices using the alarm signal description displayed locally at the FACU.
 - If the *shop drawing* submitted for fire alarm permit review can be used to easily identify initiating devices without removing wiring and A/V output devices, then that shop drawing may be used as the *BIC Floor Plan*. If the shop drawing is determined not to be conducive to allowing the quick identification of initiating devices by fire crews, then the floor plan will need to have wiring and A/V devices removed.
 - The *BIC* floor plan shows a map of the premise that allows an alarm tech or fire crew to quickly interpret a signal and find the initiating device that created that signal. Additional fire service feature information may be included.
 - **Matrix.** The matrix, or sequence of operations shall show all alarm inputs and outputs, with inputs clearly identified by **signal type and signal group**. For example smoke inputs would be labeled as alarm signals, grouped by floor. Tamper and duct detectors would be labeled as supervisory and could be grouped generally for the entire building.
- For new systems or significant alterations to a fire alarm system, or when required by a fire code official:
 - ◆ The applicant on the fire alarm permit must be qualified and the prime contractor.
 - ◆ The system may be required to be upgraded to current codes and standards.
 - ◆ The scope of the permit must include the entire fire alarm system in one permit, including the FACP and the transmitter, even if the transmitter will be provided by another listed company.
 - ◆ When a company other than the prime contractor proposes installing any fire alarm equipment, such as a listed subcontractor installing a transmitter, the plans shall clearly identify that equipment and the installing company.

I confirm that I have read the applicable code and standards and verify that the system has been designed to and will be installed in accordance with the requirements of NFPA 72 and Redmond Fire Department Standard 9.0. I understand that all applicable codes apply. Errors and/or omissions on the plans shall comply with City of Redmond ordinances and laws of the State of Washington.

Fire Alarm Designer Name

Applicant Name

Applicant Signature