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FIRE ALARM INSTALLATION STANDARD

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SUBMITTAL GUIDELINES:

Fire alarm permit plan submittals and applications shall be in electronic format. Information regarding electronic submittal requirements may be found on our [eplans Electronic review](#) page.

All digital files shall be MS windows compatible. All digital documents shall be in PDF and compatible with Adobe Acrobat version 9.0 or greater.

Fire alarm permits shall be paid for prior to plan review.

Permit fee shall include one rough wire inspection and the fire alarm final acceptance inspection and test. Partial inspections may be requested.

Partial inspection and re-inspection fees shall be based on the hourly rate as adopted by Vail Fire & Emergency Services (VF&ES).

A minimum of 2 hour fee (\$144.00) will be assessed to the fire alarm permit. Payment shall be rendered to the Town of Vail prior to a final fire alarm approval sign off.

All Fire Alarm contractors are required to be registered with the Town of Vail prior to submittal of installation permit applications. Contractors must be considered in good standing with Vail Fire & Emergency Services (VF&ES) and the Town of Vail.

Installation of Fire Alarm Systems shall comply with standards set forth in most current versions of NFPA 72, NFPA 720, and the 2015 International Fire Code or as set forth in this standard.

Plans are required to be stamped by a fire alarm design technician with NICET level 3 or 4 certification, or a Fire Protection Engineer.

Fire alarm contractor and general contractor are required to be present for both rough and final inspections.

Fire alarm contractor shall be responsible for scheduling inspections.

General contractors should not attempt to schedule these inspections unless approved by the fire alarm contractor and fire code official.

INSTALLATION GUIDELINES:

Fire alarm installation personnel shall meet the criteria set forth in NFPA 72 and this standard. Installation shall be supervised or completed by technicians holding a NICET II or higher level of certification.

Monitored residential fire alarm systems shall be zoned by floor. Fully addressable point to point identification is no longer required. (Residential systems only). Combination systems are not approved for installation. Monitored detection is required throughout entire premise.

Wireless systems (RF) are only approved for installation for residential one and two family dwellings.

Detection location and spacing shall be per the latest version of NFPA 72, the 2015 IFC and as set forth herein:

1. Shall be installed in a corridor not more than fifteen feet from the door of the farthest bedroom.
2. Smoke detection is required in living rooms, family rooms, home theatres and any rooms that may be used for sleeping.
3. Detectors need to be installed toward the middle of the room but with consideration of proximity to bathrooms, ceiling fans and return air ducts.

Kitchens and garages are not required to have heat detection installed.

Garages shall be either equipped with a sounding keypad or notification device.

Rooms containing (Alarm System) Control Units are not required to be furnished with smoke or heat detecting devices unless otherwise required by this standard or the latest version of NFPA 72. (Applies to residential systems only).

Storage rooms and closets are not required to have smoke detection.

Unfinished crawl spaces are not required to have smoke detection.

Carbon monoxide detection is required to be installed per the latest version of NFPA 72 and Colorado HB 1091. Additionally the following installation requirements shall be met:

1. Shall be installed within a corridor no further than 15 feet from the door of the farthest bedroom.
2. Within twenty feet of fuel fired appliances, including stoves, gas fire places, wood burning stoves or wood burning fire places.
3. Entrance vestibules from attached garages shall be equipped with carbon monoxide detection.
4. Areas not previously considered that are equipped with gas fired appliances that may pose a risk to health and life safety of occupants should there be a build up of carbon monoxide.

The installation of combination smoke and carbon monoxide alarms is permitted provided the temporal sounding requirements of NFPA 72 and 720 are met.

Carbon monoxide detection shall be monitored when a building or residence is equipped with a monitored fire alarm system. If the existing system is not capable of monitoring carbon monoxide detection then plug in/battery back up detection shall be allowed until such a time that a system is upgraded or replaced. Please contact VF&ES if you have questions.

INSPECTION GUIDELINES

Inspection requests can be directed to VF&ES Prevention office at 970.479.2252.

Inspection requests should be made at least 48 hours in advance. Requests for rough and final fire alarm inspections should be made by the fire alarm contractor.

Please include a contact email address where you would like to receive your electronic inspection confirmation.

A representative of both the fire alarm contractor and project manager or general contractor are required to be present for the requested inspection.

Re-inspection fees shall be assessed on an hourly basis, 2 hour minimum fee (\$144.00) and shall be due prior to project receiving final approvals.

KNOX BOX / CONTACT INFORMATION

All properties equipped with a monitored fire alarm system are required to have an approved key box on the exterior of the property. Location shall be approved by VF&ES.

Key boxes shall be furnished by the Knox Company. Boxes may be ordered electronically. Contact VF&ES Prevention Office for further guidance if needed. Step by step ordering instructions are provided on the Prevention Bureau page. Duplex and multi-family occupancies are permitted to share a single key box.

Key boxes are not required to be equipped with monitored tamper switches. Master keys and key cards are required to be presented for installation in the key box at final inspection.

Keys will not be accepted by VF&ES personnel except when on property and in the presence of a contractor or responsible party. Keys will be clearly marked as to what doors they will operate.