



Pierce County Fire Prevention Bureau
**REQUIREMENTS FOR A MONITORED
FIRE ALARM SYSTEM**



NOTE: The following information is intended to clarify requirements for monitored fire alarm systems used to meet fire protection credits. **Systems installed per these guidelines do not meet the requirements of International Residential Code Section R313. A duplicate system is required.**

Standard monitored fire alarm systems have an alarm panel receiving its primary power from the building's electrical wiring. **The alarm panel shall be provided with a battery backup system.** Smoke detectors, located in accordance with IRC Section R313.2, are connected to the panel. The alarm panel shall have an integral device or be connected to a device which will send a signal by an approved means of communication (phone line, etc.) to an approved monitoring service or agency. The system shall **not** be programmed to directly call 911 or a fire station. Activation of any smoke detector is required to sound an alarm that is audible in all sleeping areas with the doors closed. **Audibility must be at least 75 decibels at "pillow height."** All system components shall be listed and approved. If the alarm system provides multiple functions (fire, burglary, trouble) the monitoring device shall be capable of sending separate signals to the monitoring agency.

Exceptions:

1. In houses equipped with an automatic fire sprinkler system, only the sprinkler water flow device need be monitored. Activation of the sprinkler water flow is not required to sound a local audible alarm; however, such an alarm would provide an increased level of safety and would alert occupants or neighbors of system activation.
2. Other systems that provide reliable smoke detection, audible alarm and off-site monitoring may be acceptable upon approval of the Fire Marshal.

Permit: A monitored fire alarm system permit shall be applied for at time of building permit application. The fee for this permit is non-refundable.

Most alarm systems require an electrical permit from the State Department of Labor and Industries. Call (253) 596-3808 for information.

Inspection: A final inspection and test of the system shall be scheduled through the Fire Prevention Bureau before a final building inspection will be approved. Call (253) 798-7179 at least 24 hours in advance to schedule an inspection.

- **The telephone line (or other means of approved communication) must be installed prior to requesting an inspection.**
- **An alarm technician or other person fully knowledgeable of the system and capable of making adjustments or repairs must be present during inspection.**
- **A fee of \$110.00 shall be charged for an additional reinspection.**
- **No listening or "parrot" repeating devices unless approved by NFPA 72.**

SMOKE DETECTORS AND SPRINKLER SYSTEMS

Section R313 Smoke Alarms

[F] R313.2 Smoke Alarms. Smoke alarms shall be installed in the following sections:

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional story of the dwelling, including basements but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

When more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

[EB] R313.1.1 Alterations, repairs, and additions. When interior alterations, repairs or additions requiring a permit occur, or when one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be provided with smoke alarms located as required for new dwellings; the smoke alarms shall be interconnected and hard wired.

Exceptions:

1. Smoke alarms in existing area shall not be required to be interconnected and hard wired where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space, or basement available which could provide access for hard wiring and interconnection without the removal of interior finishes.
2. Repairs to the exterior surfaces of dwellings are exempt from the requirements of this section.

[F] R313.2 Power Source. In new construction, the required smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power or in buildings that undergo alterations, repairs, or additions regulated by Section R313.2.1.