

Multi-family Residential Life-Safety Systems

3/2013

RENTAL HOUSING LIFE-SAFETY SYSTEMS

Below you will find general information concerning smoke alarms, exit signage and emergency lighting, carbon monoxide alarms and fire alarm systems.

Smoke Alarms - current requirements

- Smoke alarms shall be located in sleeping rooms, outside of each separate sleeping area in the immediate vicinity of the bedroom(s) and on each floor level and in multi-family dwellings, alarms to be located every 30 feet in corridors and at the top of stairways.
- Any new or replaced smoke alarm, per State Fire Marshal rules, shall be dual sensor type.
 1. A dual sensor detector means a smoke detector which contains both an ionization sensor and a photoelectric sensor and which is designed to detect and trigger an alarm in response to smoke detected through either sensing device, or a smoke detector which has at least two sensors and which is listed to Underwriters Laboratory Standard 217, Single and Multiple Station Smoke Alarms, or to another standard approved by the state fire marshal.
 2. Dual sensor smoke detectors may use ionization and photoelectric sensors combined into one detector or they may have a smoke sensor combined with another sensor, such as carbon monoxide or heat.
 3. These may be battery operated units, unless remodeling of the space(s) is involved.

Exit Signage and Emergency Lighting for multi-family buildings with common egress components -effective July 1, 2015, and shall be confirmed at the next rental registration renewal inspection thereafter;

- Exit sign illumination - exit signs shall be internally or externally illuminated. The face of an exit sign illuminated from an external source shall have an intensity of not less than 5 footcandles. Internally illuminated signs shall provide equivalent luminance and be listed for the purpose. Exception: Approved self-luminous signs that provide evenly illuminated letters shall have a minimum luminance of 0.06 foot-lamberts (0.21 cd/m²).
- Power source - exit signs shall be visible under emergency illumination conditions. Approved signs that provide continuous illumination independent of external power sources are not required to be connected to an emergency electrical system.
- Illumination emergency power – the power supply for means of egress illumination shall normally be provided by the premises' electrical supply. In the event of power supply failure, illumination shall be automatically provided from an emergency system.

Carbon Monoxide Alarms - effective July 1, 2015, and shall be confirmed at the next rental registration renewal inspection thereafter;

- Multi-family residential buildings and units containing a fuel-burning appliance or a multi-family residential building which has an attached garage shall be equipped with single-station carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034, and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions.
 1. Install a carbon monoxide alarm in each dwelling unit.

Exception: dwelling or sleeping units two stories or more above any story containing gas-fired appliance(s) and not having any duct(s) or ventilation shaft(s) connected thereto

Exception: dwelling or sleeping units two stories or more above any story connected to an attached garage

Note: CO alarm(s) still required in common area(s) - - see #2 below
 2. Install a carbon monoxide alarm in each common area on each floor.
 3. These may be battery operated.

Manual Fire Alarm - effective July 1, 2015, and shall be confirmed at the next rental registration renewal inspection thereafter;

- Multi-family residential non-sprinklered buildings of more than sixteen units with a common interior egress/exiting system require a manual fire alarm system that activates the occupant notification system.
- Manual fire alarm system shall be National Fire Protection Association 72 compliant and shall be reviewed and approved by the City of Ankeny Fire Code Official or Building Code Official with final testing and acceptance upon completion.
- Minimum requirements for a Manual Fire Alarm system are as follows.
 1. Fire Alarm Control Panel or FACP shall be powered with 120 volt or normal facility power with secondary battery backup
 2. A manual activating device or pull station(s) shall be placed at common locations accessible to all occupants; this may be at the main entrance to the building or at each floor level with multiple floors.
 3. All common corridors/ hallway or areas of egress not open to the outside shall have smoke detectors spaced accordingly throughout and all laundry rooms, mechanical rooms or electrical rooms connected to the common corridor/hallway shall be protected with smoke/heat detection and monitored by the FACP.
 4. Notification devices shall be installed throughout the common corridors/hallways regardless of enclosed or open to the outside and shall be placed per code.
 5. The system must be inspected by an approved fire alarm company and a current compliance tag provided at the time of rental inspection.