SMOKE ALARMS AND CARBON MONOXIDE ALARMS

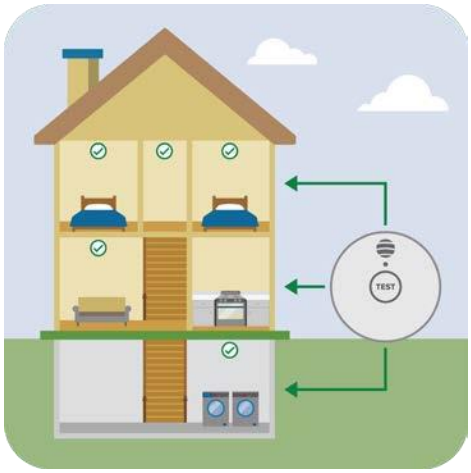
Protect Yourself, Your Family, and Other Occupants from Silent Killers

Smoke alarms and Carbon Monoxide alarms are one of the most effective ways to protect people in dwellings. Whether it is your home, apartment, condominium, or your tenant(s), having working smoke alarms and carbon monoxide alarms provide the early warning necessary for people to have an opportunity to escape should fire and/or carbon monoxide leak occur.

Maintenance of these devices is the key to keeping people safe! To help the community understand the installation requirements and the "Need to Know" maintenance elements, we have provided information on

- Where to install
- Power supply types
- Device smoke detection type
- Device life expectancy
- General maintenance and
- Replacement of existing smoke alarms and carbon monoxide alarms.

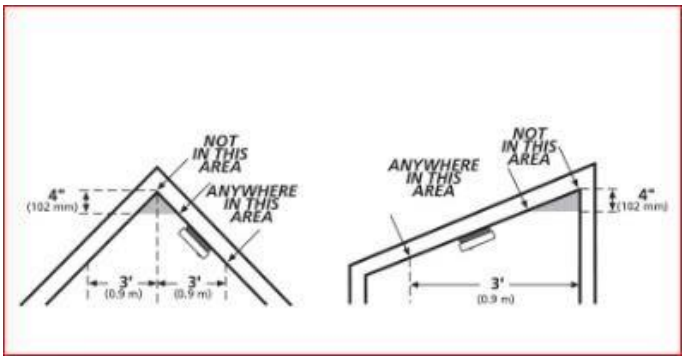
SMOKE ALARMS

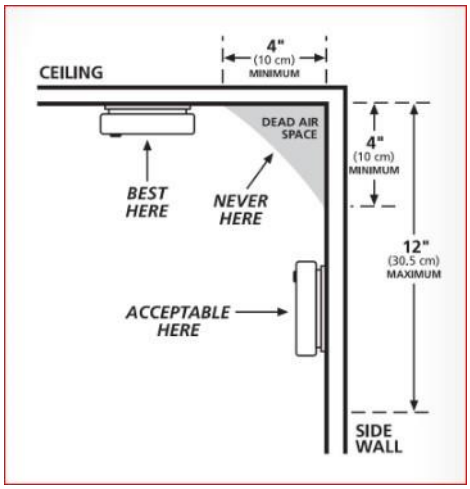


Pictogram courtesy of National Fire Administration

COVERAGE REQUIREMENTS:

All residential homes are required to have, at a minimum, a battery-operated smoke alarm in every dwelling unit or space, in each sleeping room, in the hallway serving the sleeping room(s) or area(s) and one on each level. Never install a smoke alarm within 4 inches of the corner between a wall and ceiling. For more information on installation locations, consult the Manufacturer's Installation Guide or go to NFPA Public Education "Installing and Maintaining Smoke Alarms" page.





Photos: Courtesy of Kidde for pitched ceilings and flat ceiling installation

POWER SUPPLY: BATTERY VS. HARDWIRED SMOKE ALARMS

Battery operated smoke alarms receive their power from one source, a battery. Many of the existing battery operated smoke alarms have an accessible battery. Hardwired smoke alarms receive their primary (main) power from your dwelling unit's electrical supply and have a secondary power source - a battery.

***WARNING:* Smoke alarms MUST have power to provide warning. Attentiveness is necessary to reduce accidental death.**

DETECTION TYPE IONIZATION VS. PHOTOELECTRIC

Ionization smoke alarms are generally more responsive to flaming fires and **photoelectric smoke alarms** are generally more responsive to fires that smolder. Ionization smoke alarms are the most widely used smoke alarm on the market. Using both technologies will provide for the greatest protection and both technologies are available in a single unit. Coverage requirements still apply. For Learn More, go to [NFPA's Ionization vs Photoelectric Information Page].

LIFE EXPECTANCY

Smoke Alarms whether battery operated or hardwired have an expiration date set by the manufacturer. Generally, the life expectancy is 10 years from the manufacturers date. To find the expiration date, remove smoke alarm from the bracket and look for the date found on the backside of the smoke alarm.

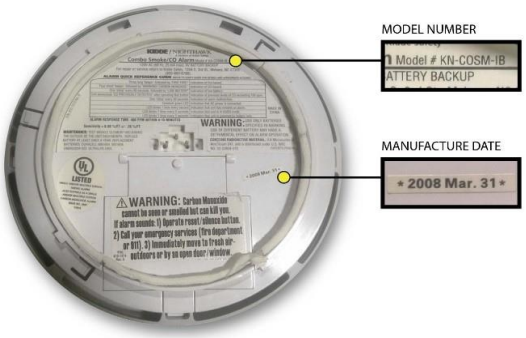


Photo: Location of manufacture date and model number for Kidde smoke alarm

We recommend writing the replacement date on the outside of the smoke alarm: Replace 03/2023 - Newer models may have a sticker to write the replacement date. Lastly, make sure the date is where it can be seen..

Note: Combination Smoke Alarm and Carbon Monoxide Alarms have a life expectancy of 6 to 10 years. Consult Manufacturer's Guide Book for specific device expiration timeline.

MAINTENANCE

Smoke alarms need to be serviced regularly to maintain their sensitivity to combustion particulates. Always consult the manufacturer's installation and care instructions for specific details. Here are a few things you can do to help improve your smoke alarm effectiveness.

- Use a vacuum to clean the sensing chamber,
- Never paint the smoke alarm,
- Keep all aerosols away from smoke alarms,
- Test monthly by using the test button on the device
- Battery operated smoke alarms and hardwired smoke alarms with battery backup should have their batteries replaced when clocks change during daylight savings time.

SMOKE ALARM REPLACEMENT

Starting July 1, 2014, **ALL** battery-operated smoke alarms must be replaced with a 10-year non-accessible battery smoke alarm at the end of the existing installed battery-operated smoke alarms' expiration date or when replaced, whichever is less, with 10-year non-accessible battery type smoke alarm.

Example: Battery operated smoke alarm installed in March 2012 with a 10-year expiration date must be replace with a battery operated smoke alarm with a non-accessible battery in March 2022 (10 years later). Any device replaced after July 1, 2014, regardless of the or when the device is replaced if sooner but after July 2014.

Hardwired smoke alarms are required to be installed for all newly constructed residential dwellings, or when remodeling triggers installation of hardwired smoke alarms. Consult with your City's' building department for further details.

CARBON MONOXIDE ALARMS

Photo: Battery Operated Carbon Monoxide Detector by Kidde

COVERAGE REQUIREMENTS:

All residential homes with fossil fuel burning appliances are required to have, at a minimum, one carbon monoxide (CO) alarm installed in a central location outside each sleeping area and on every level of the home and in other locations where fossil fuel burning appliances are installed. For more information on the dangers of Carbon Monoxide, Read First Alerts "Carbon Monoxide FAQ sheet.

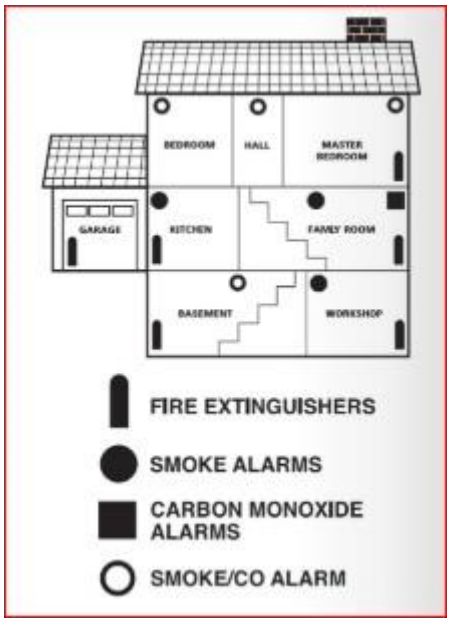


Photo: Diagram of Recommended location of Smoke and Carbon Monoxide Alarms provided by Kidde

POWER SUPPLY: BATTERY, HARDWIRED, AND AC PLUG-IN CARBON MONOXIDE ALARMS

Battery operated carbon monoxide alarms receive their power from one source, a battery. Many of the existing battery operated carbon monoxide alarms have an accessible battery. Hardwired Carbon Monoxide alarms are found when a combination smoke/carbon monoxide alarm is installed in structures built on or after January 1, 2014. The alarm receives their primary (main) power from your dwelling unit's electrical supply and have a secondary power source - a battery. The AC Plug-In device provides an alternative when hardwired power supply is not provided and a duel power source is desired.

Devices shall be tested monthly by pushing the test button. Replace batteries twice a year, each time clocks are changed for daylight savings time or when device chirps intermittently. Older devices may not have a chirping alarm, replacement is strongly recommended.

WARNING: ***Carbon Monoxide alarms MUST have power to provide warning. Vigilance is necessary to reduce accidental death. There is no visual, audible, or smell present should a leak occur without power to a carbon monoxide alarm.***

DETECTION TYPE

Carbon monoxide alarms only detect carbon monoxide.

LIFE EXPECTANCY

Carbon Monoxide alarms, battery or hardwired, have an expiration date set by the manufacturer. Generally, the life expectancy ranges 6 to 10 years from the manufacturers date. Typically, CO alarms manufactured prior to 2013 will have a shorter life expectancy. To find the expiration date, remove the carbon monoxide alarm from the bracket and look for the date found on the backside of the device or call the manufacturer with the model number for more information.

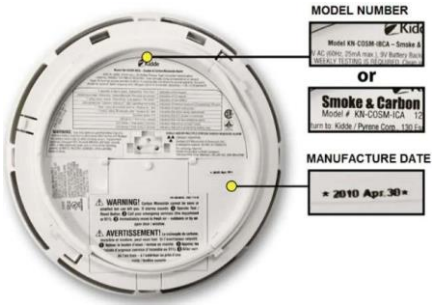


Photo: Location of manufacture date and model number for Kidde smoke/carbon monoxide alarm

We recommend writing the replacement date on the outside of the carbon monoxide alarm: Replace 03/2023 - Newer models may have a sticker to write the replacement date. Lastly, make sure the replacement date is visible.

MAINTENANCE

Smoke alarms need to be serviced regularly to maintain their sensitivity to combustion particulates. Always consult the manufacturer's installation and care instructions for specific details. Here is a few things you can do to help improve your carbon monoxide alarm effectiveness:

- Use a vacuum to clean the sensing chamber monthly,
- Never paint the CO alarm,
- Keep all aerosols away from CO alarms,
- Test monthly by using the test/reset button on the device
- Battery operated smoke alarms and hardwired smoke alarms with battery backup should have their batteries replaced when clocks change during daylight savings time.

CARBON MONOXIDE ALARM REPLACEMENT

Contact the manufacturer for Hardwired smoke alarm replacements. There is either specific replacement model or an adapter which can be used to install a similar alarm type. Below is a link to three most common manufacturers in the residential smoke alarm and carbon monoxide alarm business for your convenience.

- Kidde
- First Alert
- Universal Security Instruments

Replace like for like – **NEVER** replace a hardwired alarm with battery only device. Construction codes required the hardwired smoke alarm installation in 1989.

- Starting July 1, 2014, **ALL** battery-operated carbon monoxide alarms with smoke alarm technology must be replaced with a 10-year non-accessible battery smoke/carbon monoxide alarm at the expiration date defined by the manufacturer.

  Example: Battery operated carbon monoxide alarms with a Manufacturer date of March 2010 and a 6-year expiration date, the device must be replaced by March 2016.

RECALLS

From time-to-time specific models of smoke alarms, carbon monoxide alarms, and the combination smoke/carbon monoxide alarm along with other consumer products are recalled. To verify if your model has been recalled, Go to Consumer Product Safety Commission to search if the product in your residence has been recalled.