



Risk Reduction

A division of the

Manhattan Fire Department

Scott French, Fire Chief

2000 Denison Ave. ♦ Manhattan, KS 66502 ♦ 785-587-4506 ♦ Emergency Dial 911

Carbon Monoxide Alarm Requirements in Homes Undergoing Alteration, Repair, or Addition

The 2018 International Residential Code prescribes specific requirements for carbon monoxide (CO) alarms in homes that are undergoing alterations, repairs or additions. The purpose of this document is to clarify these requirements which are found in section 315 of the 2018 International Residential Code.

When are CO alarms required?

When undergoing an interior alteration, repair, or addition that requires a building permit, homes that contain fuel burning appliances, fireplaces or that have an attached garage are required to have CO alarms.

Where are CO alarms required to be installed?

CO alarms are required to be installed in the area outside of any bedroom. If a bedroom contains a fuel burning appliance or fireplace, a CO alarm shall be installed in the bedroom. **Please be advised, this may require installation of CO alarms outside of the work area.**

What are the power supply requirements? (Hardwired vs. Battery powered)

CO alarms are required to be hardwired in the following locations:

- In additions containing bedrooms
- When finishing previously unfinished areas that contain bedrooms (Example: finishing an unfinished basement or attic)
- Renovations of bedrooms or areas outside of bedrooms where wall and ceiling finishes are removed in the scope of the project.

CO alarms in all other locations are permitted to be battery powered. Any existing hardwired alarm shall remain hardwired.

What are the interconnection requirements?

When multiple CO alarms are installed in a home to satisfy the requirements of the code, CO alarms are required to be interconnected. However, CO alarms installed in existing areas are not required to be interconnected when both of the following conditions exist:

- The scope of the project does not result in wall or ceiling finishes being removed in the area where the CO alarm is required to be installed, and
- There is no attic, crawl space or basement available that could provide access for interconnection without removal of the interior finishes.