



CHANGE TYPE: Addition

CHANGE SUMMARY: The 2009 IRC requires carbon monoxide alarms in new dwellings and in existing dwellings when work requiring a permit takes place. The carbon monoxide alarms must be installed in the immediate vicinity of sleeping areas.

R315

Carbon Monoxide Alarms

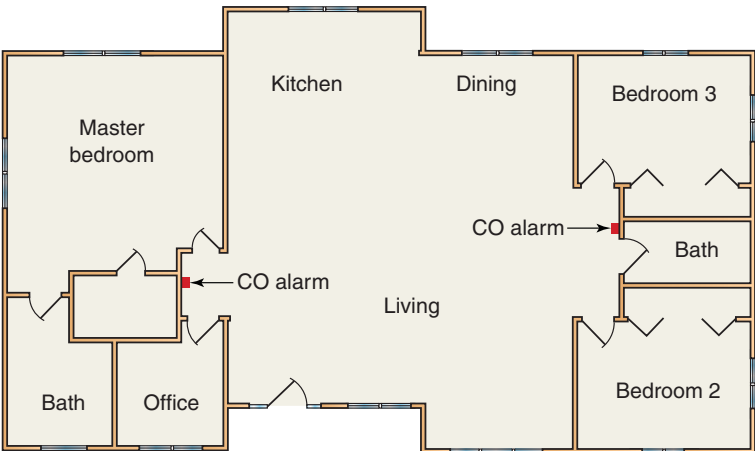
2009 CODE: Section R315 Carbon Monoxide Alarms

R315.1 Carbon Monoxide Alarms. For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units within which fuel-fired appliances are installed and in dwelling units that have attached garages.

R315.2 Where Required in Existing Dwellings. Where work requiring a permit occurs in existing dwellings that have attached garages or in existing dwellings within which fuel-fired appliances exist, carbon monoxide alarms shall be provided in accordance with Section R315.1.

R315.3 Alarm Requirements. Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions.

CHANGE SIGNIFICANCE: Carbon monoxide alarms are now required in new dwelling units constructed under the 2009 IRC. Because the source of unsafe levels of carbon monoxide in the home is typically from faulty operation of a fuel-fired furnace or water heater, or from the exhaust of an automobile, this new requirement applies only to homes containing fuel-fired appliances or having an attached garage. Carbon



Carbon monoxide (CO) alarm installed in the immediate vicinity of each sleeping area

monoxide accumulates in the body over time relative to its concentration in the air. Accordingly, carbon monoxide detectors sound an alarm based on the concentration of carbon monoxide and the amount of time that certain levels are detected, simulating an accumulation of the toxic gas in the body. High levels of carbon monoxide will trigger an alarm within a short time, while lower levels must be present over a longer time period for the alarm to sound. This design prevents false-positive alarms. This change in the code recognizes the improved reliability of carbon monoxide alarms and the referenced standard, UL 2034, *Single and Multiple Station Carbon Monoxide Alarms*, and intends to reduce accidental deaths from carbon monoxide poisoning.

Under the new provisions, carbon monoxide alarms are also required in existing dwelling units. Similar to the smoke alarm provisions, this requirement for installation of carbon monoxide alarms is triggered by construction work on the existing dwelling where such work requires a permit. Unlike the smoke alarm requirements, there is no exception for exterior work or the addition of decks or porches. Roofing, siding, window replacement, and other exterior work requiring a permit will require the installation of carbon monoxide alarms.

Because carbon monoxide poisoning deaths often occur when the occupant is sleeping, the IRC requires carbon monoxide alarms to be located in the areas outside of and adjacent to bedrooms.