



# CARBON MONOXIDE ALARMS

City of Lawrence

Department of Public Works

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This handout is intended only as a guide to the subject matter covered herein and is based in part on the 2020 Indiana Residential Code. While every attempt has been made to insure the correctness of this handout, no guarantees are made to its accuracy or completeness. Responsibility for compliance with applicable codes and ordinances falls on the owner or contractor. For specific questions regarding code requirements, refer to the Indiana Building Code or contact your local Building Department.

Carbon monoxide alarms are required by the Indiana Residential Code in new construction and whenever there is a permit issued for any type of interior work on an existing dwelling unit or townhouse that contains a fuel-fuel fired appliance or an attached garage.

Carbon monoxide alarms must be installed on each floor containing sleeping rooms. The Indiana Residential Building Code permits either single station alarms or approved systems.

In existing dwellings, any time a permit is issued for any interior work (building, plumbing, heating, ventilating, air-conditioning or electrical), carbon monoxide alarms must be installed. Example: If you hire a plumber to install a new water heater in your home, CO alarms are required. The responsibility for installing the alarm falls on the permit applicant. CO alarms are required if any fuel burning appliances exist or if you have an attached garage. The text from the Indiana Residential Building Code follows.

## SECTION R315 CARBON MONOXIDE ALARMS

### R315.1 General.

Carbon monoxide alarms shall comply with Section R315.

#### R315.1.1 Listings.

Carbon monoxide alarms shall be *listed* in accordance with UL 2034. Combination carbon monoxide and smoke alarms shall be *listed* in accordance with UL 2034 and UL 217.

### R315.2 Where required.

Carbon monoxide alarms shall be provided in accordance with Sections R315.2.1 and R315.2.2.

#### R315.2.1 New construction.

For new construction, carbon monoxide alarms shall be provided in dwelling units where either or both of the following conditions exist.

1. The *dwelling unit* contains a fuel-fired *appliance*.
2. The *dwelling unit* has an attached garage with an opening that communicates with the dwelling unit.

2020 Amendment ~ R315.2.2 ALTERATIONS, ADDITIONS, AND SYSTEMS REPLACEMENT. Where alterations, additions, or complete replacement of the electrical system requiring a permit occurs, the individual dwelling unit shall be equipped with carbon monoxide alarms located as required for new dwellings.

**R315.3 Location.**

Carbon monoxide alarms in *dwelling units* shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms. Where a fuel-burning *appliance* is located within a bedroom or its attached bathroom, a carbon monoxide alarm shall be installed within the bedroom.

**R315.4 Combination alarms.**

Combination carbon monoxide and smoke alarms shall be permitted to be used in lieu of carbon monoxide alarms.

**R315.5 Interconnectivity.**

Where more than one carbon monoxide alarm is required to be installed within an individual *dwelling unit* in accordance with Section R315.3, 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 *dwelling unit*. Physical interconnection of carbon monoxide alarms shall not be required where *listed* wireless alarms are installed and all alarms sound upon activation of one alarm.

**Exception:** Interconnection of carbon monoxide alarms in existing areas shall not be required where *alterations or repairs* do not result in removal of interior wall or ceiling finishes exposing the structure, unless there is an *attic*, crawl space or basement available that could provide access for interconnection without the removal of interior finishes.

**R315.6 Power source.**

Carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and, where 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.

**Exceptions:**

1. Carbon monoxide alarms shall be permitted to be battery operated where installed in buildings without commercial power.
2. Carbon monoxide alarms installed in accordance with Section R315.2.2 shall be permitted to be battery powered.

**R315.7 Carbon monoxide detection systems.**

Carbon monoxide detection systems shall be permitted to be used in lieu of carbon monoxide alarms and shall comply with Sections R315.7.1 through R315.7.4.

**R315.7.1 General.**

Household carbon monoxide detection systems shall comply with NFPA 720. Carbon monoxide detectors shall be *listed* in accordance with UL 2075.

**R315.7.2 Location.**

Carbon monoxide detectors shall be installed in the locations specified in Section R315.3. These locations supersede the locations specified in NFPA 720.

**R315.7.3 Permanent fixture.**

Where a household carbon monoxide detection system is installed, it shall become a permanent fixture of the occupancy and owned by the homeowner.

**R315.7.4 Combination detectors.**

Combination carbon monoxide and smoke detectors installed in carbon monoxide detection systems in lieu of carbon monoxide detectors shall be *listed* in accordance with UL 2075 and UL 268.