

Carbon Monoxide Alarms/Detectors in Existing Structures

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Code reference: 2023 Oregon Residential Specialty Code (ORSC)—Section R315
Date: Issued—Oct. 1, 2017
Last updated—Oct. 1, 2023
Subject: Carbon monoxide (CO) alarms/detectors in existing structures

Questions/Answers:

1. When replacing a fuel-fired appliance with another fuel-fired appliance in an existing structure, are CO alarms/detectors required?

No

2. When replacing an electric appliance with a fuel-fired appliance, are CO alarms/detectors required?

Yes

3. Who is responsible for installing the CO alarms/detectors?

The permit holder is responsible for ensuring the CO alarms/detectors are installed.

Analysis:

The replacement of a carbon monoxide source with another carbon monoxide source is not adding a new source; therefore, the installation of CO alarms/detectors would not be required, even though a mechanical permit may be required. A few of the most common examples of a source for source replacement are replacing an oil furnace with a gas furnace, inserting a pellet stove into a solid fuel-burning fireplace, installing a fuel-gas decorative appliance into a solid fuel-burning fireplace, or replacing a 78-percent efficient gas furnace with a current code compliant gas furnace.

Although these examples would require a mechanical permit, they would not mandate the installation of CO alarms/detectors. If the installation is a change from electric to gas, a new source of carbon monoxide would be added that did not previously exist, therefore CO alarms/detectors would be required.

When adding CO alarms/detectors, whether triggered by a structural permit or when a new source is added, the person to whom the permit is issued, is responsible for ensuring that CO alarms/detectors are installed per Section R315. The final approval of the permit would include verification that CO alarms/detectors are installed.

Contact:

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