

## Carbon Monoxide Detector Installation Requirements Guidance Key

The purpose of the document is to provide a framework for evaluating lodging facilities to determine if carbon monoxide detector installation is required. Begin with Step 1 and follow the instructions for the applicable YES or NO answer. Continue through the document until a conclusion is reached.

1. Are any of the following situations present?
  - a. A unit contains a fuel-burning appliance.
  - b. A unit is served by a fuel-burning, forced-air furnace.
  - c. A unit is in a residential building that contains a fuel-burning appliance.
  - d. A unit is in a residential building that contains an attached private garage.

YES: Go to Step 2.

NO: Carbon monoxide detection requirements are not applicable.

2. Do all of the fuel-burning appliances in the residential building have sealed combustion appliances that are either covered by the manufacturer's warranty against defect or are HVAC inspected?

YES: Carbon monoxide detection requirements are not applicable.

NO: Go to Step 3a, 3b, 3c, or 3d.

3. Is there an applicable exception for the observed situation(s)?

- a. A unit that contains a fuel-burning appliance:

**No exception. Carbon monoxide detectors are required in units, outside of each separate sleeping area in the immediate vicinity of the sleeping rooms *and* in sleeping rooms, if a fuel-burning appliance is located within the sleeping room or its attached bathroom.**

- b. A unit that is served by a fuel-burning, forced-air furnace:

- i. Does the first room or area served by each main duct have carbon monoxide detection?

YES: Go to Question 3(b)(ii).

NO: **Carbon monoxide detectors are required in units, outside of each separate sleeping area in the immediate vicinity of the sleeping rooms *and* in sleeping rooms, if a fuel-burning appliance is located within the sleeping room or its attached bathroom.**

- ii. Are the alarm signals automatically transmitted to all units served by the fuel-burning forced air furnace and to a designated location for continuous monitoring?

YES: No additional carbon monoxide detectors are needed to satisfy this situation.

NO: Go to Question 3(b)(iii).

- iii. Is a carbon monoxide detector installed in every 4<sup>th</sup> unit on the same floor as the first room or area served by each main duct leaving the furnace?

YES: No additional carbon monoxide detectors are needed to satisfy this situation.

NO: **Carbon monoxide detectors are required in units, outside of each separate sleeping area in the immediate vicinity of the sleeping rooms *and* in sleeping rooms, if a fuel-burning appliance is located within the sleeping room or its attached bathroom.**

- c. A unit is in a building that contains a fuel-burning appliance:

- i. Are there any openings between the fuel-burning appliance and the unit through which carbon monoxide can get into that unit?

YES: Go to question 3(c)(ii).

NO: No additional carbon monoxide detectors are needed to satisfy this situation.

- ii. Is a carbon monoxide detector provided between the fuel-burning appliance and the unit or on the ceiling of the room containing the fuel-burning appliance?

YES: No additional carbon monoxide detectors are needed to satisfy this condition.

NO: **Carbon monoxide detectors are required in units, outside of each separate sleeping area in the immediate vicinity of the sleeping rooms *and* in sleeping rooms, if a fuel-burning appliance is located within the sleeping room or its attached bathroom.**

- d. A unit is in a building that contains an attached private garage:

- i. Are there any openings between the private garage and the unit through which carbon monoxide can get into that unit?

YES: Go to Question 3(d)(ii).

NO: No additional carbon monoxide detectors are needed to satisfy this situation.

- ii. Is the unit located more than one story above or below the private garage?

YES: No additional carbon monoxide detectors are needed to satisfy this situation.

NO: Go to Question 3(d)(iii).

iii. Is the private garage connected to the residential building through an open-ended corridor?

YES: No additional carbon monoxide detectors are needed to satisfy this situation.

NO: Go to Question 3(d)(iv).

iv. Is a carbon monoxide detector provided between the openings to the private garage and units?

YES: No additional carbon monoxide detectors are needed to satisfy this situation.

NO: Go to Question 3(d)(v).

v. Does the private garage have openings designed to provide natural ventilation or is mechanically ventilated, in accordance with rules for natural and mechanical ventilation in public parking garages?

YES: No additional carbon monoxide detectors are needed to satisfy this situation.

NO: **Carbon monoxide detectors are required in units, outside of each separate sleeping area in the immediate vicinity of the sleeping rooms *and* in sleeping rooms, if a fuel-burning appliance is located within the sleeping room or its attached bathroom.**

*Defined Terms:*

*“Residential building” means a tourist rooming house, a bed and breakfast establishment, or any public building that is used for sleeping or lodging purposes.*

*“Unit” means a part of a residential building that is occupied by one or more persons as a home, residence, or sleeping place.*

*“Sleeping area” means the area of the unit in which the bedrooms or sleeping rooms are located. Bedrooms or sleeping rooms separated by another use area such as a kitchen or living room are separate sleeping areas but bedrooms or sleeping rooms separated by a bathroom are not separate sleeping areas.*

*“Fuel-burning appliance” means a device that burns fossil fuel or carbon-based fuel and that produces carbon monoxide (CO) as a combustion by-product.*

*“Carbon monoxide detector” means an electronic or battery-operated device or system that sounds an alarm when an unsafe level of carbon monoxide is in the air.*