

TITLE: CARBON MONOXIDE ALARM
VERSION: V2.2.1
DATE PUBLISHED: 04/18/22

DEFINITION: Device that detects elevated levels of carbon monoxide and signals via auditory or visual alarm in order to prevent carbon monoxide poisoning.

PURPOSE: Detect and signal elevated carbon monoxide levels to prevent poisoning.

COMMON COMPONENTS: Sensor; power source / battery; casing; wiring; base; alarm / alarm circuit; strobe light; LCD panel / visual display; microprocessor; circuit board

LOCATION: Unit Where required as described in the Deficiency Criteria
 Inside Where required as described in the Deficiency Criteria
 Outside None

MORE INFORMATION: This is not a replacement for a code inspection. All requirements of IFC Sections 915 and 1103 must be met, even though only the criteria listed herein will be inspected for in a NSPIRE inspection.

DEFICIENCY 1: Carbon monoxide alarm is missing, not installed, or not installed in a proper location.

LOCATION: Unit Inside

DEFICIENCY 2: Carbon monoxide alarm is obstructed.

LOCATION: Unit Inside

DEFICIENCY 3: Carbon monoxide alarm does not produce audio or visual alarm when tested.

LOCATION: Unit Inside

DEFICIENCY I — UNIT: CARBON MONOXIDE ALARM IS MISSING, NOT INSTALLED, OR NOT INSTALLED IN A PROPER LOCATION.

- DEFICIENCY CRITERIA: Carbon monoxide alarm is missing (i.e., evidence of prior installation, but is now not present or is incomplete).
OR
One (1) or more of the following scenarios exists:
1. Unit contains a fuel-burning appliance or fuel-burning fireplace, and a carbon monoxide alarm is not installed:
 - a. in the immediate vicinity of each sleeping area.
OR
 - b. within each sleeping area.
 2. Sleeping area or bathroom attached to sleeping area:
 - a. contains a fuel-burning appliance or fuel-burning fireplace.
OR
 - b. has adjacent spaces from which byproducts of combustion gases can flow.
AND
 - c. Carbon monoxide alarm is not installed in each sleeping area.
 3. Unit or sleeping area is served by a forced-air furnace that is located elsewhere and a carbon monoxide alarm is not installed:
 - a. in the immediate vicinity of each sleeping area.
OR
 - b. within each sleeping area.
OR
 - c. within the room or area with the first duct register and the carbon monoxide alarm signals are automatically transmitted to an approved location.
 4. Unit or sleeping area is located in a building that contains a fuel-burning appliance or fuel-burning fireplace and:
 - a. a carbon monoxide alarm is not installed in an approved location between the fuel-burning appliance or fuel-burning fireplace and the Unit or sleeping area.
OR
 - b. a carbon monoxide alarm is not installed on the ceiling of the room containing the fuel-burning appliance or fuel-burning fireplace.
OR
 - c. the Unit or sleeping area has communicated openings to the fuel-burning appliance or fuel-burning fireplace and a carbon monoxide alarm is not installed:
 - i. in the immediate vicinity of each sleeping area.
OR
 - ii. within each sleeping area.
 5. Unit or sleeping area is located one (1) story or less above or below an attached private garage that:
 - a. does not have natural ventilation.
OR
 - b. is enclosed and does not have a ventilation system for vehicle exhaust.
AND
 - c. Carbon monoxide alarm is not installed:
 - i. in the immediate vicinity of each sleeping area.
OR
 - ii. within each sleeping area.
-

HEALTH AND SAFETY DETERMINATION:	Life-Threatening	The Life-Threatening category includes deficiencies that, if evident in the home or on the property, present a high risk of death to resident.
CORRECTION TIMEFRAME:	24 hours	
HCV PASS / FAIL	Fail	
HCV — CORRECTION TIMEFRAME:	24 hours	

INSPECTION PROCESS:

- OBSERVATION:**
- Identify all fuel-burning appliances and fuel-burning fireplaces.
 - Identify all adjacent spaces from which byproducts of combustion gases can flow (e.g., attached garage, mechanical room, laundry).
 - Identify all areas used for sleeping.
 - If a fuel-burning appliance, fuel-burning fireplace, or adjacent space from which byproducts of combustion gases can flow is present, then verify that a carbon monoxide alarm is installed within each sleeping area and in the immediate vicinity of each sleeping area.
- REQUEST FOR HELP:** Ask the POA to identify the following within the Unit:
- fuel-burning appliances; and
 - fuel-burning fireplaces; and
 - adjacent spaces from which byproducts of combustion gases can flow.
- ACTION:** - None
- More Information:** - None
-

DEFICIENCY I — INSIDE: CARBON MONOXIDE ALARM IS MISSING, NOT INSTALLED, OR NOT INSTALLED IN A PROPER LOCATION.

- DEFICIENCY CRITERIA: Carbon monoxide alarm is missing (i.e., evidence of prior installation, but is now not present or is incomplete).
 OR
 One (1) or more of the following scenarios exists:
1. Classroom contains a fuel-burning appliance or fuel-burning fireplace, and a carbon monoxide alarm is not installed:
 - a. in the immediate vicinity of each sleeping area.
OR
 - b. within each sleeping area.
 2. Sleeping area or bathroom attached to sleeping area:
 - a. contains a fuel-burning appliance or fuel-burning fireplace.
OR
 - b. has adjacent spaces from which byproducts of combustion gases can flow.
AND
 - c. Carbon monoxide alarm is not installed in each sleeping area.
 3. Sleeping area or classroom is served by a forced-air furnace that is located elsewhere and a carbon monoxide alarm is not installed:
 - a. in the immediate vicinity of each sleeping area.
OR
 - b. within each sleeping area.
OR
 - c. within the room or area with the first duct register and the carbon monoxide alarm signals are automatically transmitted to an approved location.
 4. Sleeping area or classroom is located in a building that contains a fuel-burning appliance or fuel-burning fireplace and:
 - a. a carbon monoxide alarm is not installed in an approved location between the fuel-burning appliance or fuel-burning fireplace and the sleeping area or classroom.
OR
 - b. a carbon monoxide alarm is not installed on the ceiling of the room containing the fuel-burning appliance or fuel-burning fireplace.
OR
 - c. the sleeping area or classroom has communicated openings to the fuel-burning appliance or fuel-burning fireplace and a carbon monoxide alarm is not installed:
 - i. in the classroom.
OR
 - ii. in the immediate vicinity of each sleeping area.
OR
 - iii. within each sleeping area.
 5. Sleeping area or classroom is located one (1) story or less above or below an attached private garage that:
 - a. does not have natural ventilation.
OR
 - b. is enclosed and does not have a ventilation system for vehicle exhaust.
AND
 - c. Carbon monoxide alarm is not installed:
 - i. in the classroom.

- OR
- ii. in the immediate vicinity of each sleeping area.
- OR
- iii. within each sleeping area.

HEALTH AND SAFETY DETERMINATION: Life-Threatening The Life-Threatening category includes deficiencies that, if evident in the home or on the property, present a high risk of death to resident.

CORRECTION TIMEFRAME: 24 hours

HCV PASS / FAIL: Fail

HCV — CORRECTION TIMEFRAME: 24 hours

INSPECTION PROCESS:

- OBSERVATION:**
- Identify all fuel-burning appliances and fuel-burning fireplaces.
 - Identify all adjacent spaces from which byproducts of combustion gases can flow (e.g., attached garage, mechanical room, laundry).
 - Identify all areas used for sleeping.
 - If a fuel-burning appliance, fuel-burning fireplace, or adjacent space from which byproducts of combustion gases can flow is present, then verify that a carbon monoxide alarm is installed within:
 - the classroom; and
 - each sleeping area; and
 - in the immediate vicinity of each sleeping area.

- REQUEST FOR HELP:** Ask the POA to identify the following within the Unit:
- fuel-burning appliances; and
 - fuel-burning fireplaces; and
 - adjacent spaces from which byproducts of combustion gases can flow.

ACTION: - None

- More Information:**
- A classroom may include but is not limited to daycare centers, community centers, and preschools.
 - A sleeping area includes places where individuals sleep in a daycare facility.
-

DEFICIENCY 2 — UNIT: CARBON MONOXIDE ALARM IS OBSTRUCTED.

DEFICIENCY CRITERIA: Carbon monoxide alarm is obstructed

HEALTH AND SAFETY DETERMINATION: Life-Threatening The Life-Threatening category includes deficiencies that, if evident in the home or on the property, present a high risk of death to resident.

CORRECTION TIMEFRAME: 24 hours

HCV PASS / FAIL: Fail

HCV — CORRECTION TIMEFRAME: 24 hours

INSPECTION PROCESS:

OBSERVATION: - Look for presence of a carbon monoxide alarm.

REQUEST FOR HELP: - None

ACTION: - Determine if the carbon monoxide alarm is covered by a foreign object (e.g., plastic bag, shower cap, zip tie, paint, tape).

More Information: - A combination smoke and CO alarm should be evaluated under both the Carbon Monoxide Alarm and Smoke Alarm standards.

DEFICIENCY 2 — INSIDE: CARBON MONOXIDE ALARM IS OBSTRUCTED.

DEFICIENCY CRITERIA: Carbon monoxide alarm is obstructed.

HEALTH AND SAFETY DETERMINATION: Life-Threatening The Life-Threatening category includes deficiencies that, if evident in the home or on the property, present a high risk of death to resident.

CORRECTION TIMEFRAME: 24 hours

HCV PASS / FAIL: Fail

HCV — CORRECTION TIMEFRAME: 24 hours

INSPECTION PROCESS:

- OBSERVATION:** - Look for the presence of a carbon monoxide alarm.
- REQUEST FOR HELP:** - None
- ACTION:** - Determine if the carbon monoxide alarm is covered by a foreign object (e.g., plastic bag, shower cap, zip tie, paint, tape).
- More Information:** - A combination smoke and CO alarm should be evaluated under both the Carbon Monoxide Alarm and Smoke Alarm standards.

DEFICIENCY 3 — UNIT: CARBON MONOXIDE ALARM DOES NOT PRODUCE AUDIO OR VISUAL ALARM WHEN TESTED.

DEFICIENCY CRITERIA: Carbon monoxide alarm does not produce an audio or visual alarm when tested.

HEALTH AND SAFETY DETERMINATION: Life-Threatening The Life-Threatening category includes deficiencies that, if evident in the home or on the property, present a high risk of death to resident.

CORRECTION TIMEFRAME: 24 hours

HCV PASS / FAIL: Fail

HCV — CORRECTION TIMEFRAME: 24 hours

INSPECTION PROCESS:

- OBSERVATION:**
- Look at the carbon monoxide alarm to find a test button; if no test button is present, disregard this deficiency.
 - Look to see if the light on the carbon monoxide alarm flashes, strobes, or changes pattern in any way.
 - Listen to hear if an alarm is emitted from the carbon monoxide alarm.
- REQUEST FOR HELP:**
- If the test button is over 8 feet high, you may ask the POA to press test button.
- ACTION:**
- If the test button is less than 8 feet high, press the test button.
- More Information:**
- If the batteries are dead, then the CO alarm should be evaluated under this deficiency.
 - Any CO alarm that is present should be evaluated under this deficiency.
 - May utilize a tool to press the test button.

DEFICIENCY 3 — INSIDE: CARBON MONOXIDE ALARM DOES NOT PRODUCE AUDIO OR VISUAL ALARM WHEN TESTED.

DEFICIENCY CRITERIA: Carbon monoxide alarm does not produce an audio or visual alarm when tested.

HEALTH AND SAFETY DETERMINATION: Life-Threatening The Life-Threatening category includes deficiencies that, if evident in the home or on the property, present a high risk of death to resident.

CORRECTION TIMEFRAME: 24 hours

HCV PASS / FAIL: Fail

HCV — CORRECTION TIMEFRAME: 24 hours

INSPECTION PROCESS:

OBSERVATION:

- Look at the carbon monoxide alarm to find a test button; if no test button is present, disregard this deficiency.
- Look to see if the light on the carbon monoxide alarm flashes, strobes, or changes pattern in any way.
- Listen to hear if an alarm is emitted from the carbon monoxide alarm.

REQUEST FOR HELP: - If the test button is over 8 feet high, you may ask the POA to press test button.

ACTION: - If the test button is less than 8 feet high, press the test button.

More Information:

- If the batteries are dead, then the CO alarm should be evaluated under this deficiency.
- Any CO alarm that is present should be evaluated under this deficiency.
- May utilize a tool to press the test button.

SUMMARY OF CHANGES

TITLE: CARBON MONOXIDE ALARM
VERSION: V2.2
DATE PUBLISHED: 04/18/22

FIELD	CHANGE	VERSION	DATE
More Information	Revised response	V2.2	2022-04-18
Deficiency 1		V2.2	2022-04-18
Deficiency Criteria	Unit & Inside: Full revision		
Name Variants	Revised to include common name variants	V2.2	2022-04-18
Common Materials	Revised to include “plastic”	V2.2	2022-04-18
Common Components	Revised to include common components	V2.2	2022-04-18
Deficiency 1		V2.2	2022-04-18
Title	Revised to carbon monoxide “alarm”		
Deficiency Criteria	Unit & Inside: Full revision		
Inspection Process	Unit & Inside: Full revision		
Rationale	Unit & Inside: Revised rationales and explanations		
Deficiency 2	Revised to carbon monoxide “alarm” throughout	V2.2	2022-04-18
Deficiency 3	Revised to carbon monoxide “alarm” throughout	V2.2	2022-04-18
Title	Revised title to “Carbon Monoxide Alarm”	V2.1	2021-04-02
Name Variants	Revised to “None”	V2.1	2021-04-02
Common Materials	Revised to “None”	V2.1	2021-04-02
Common Components	Revised to “None”	V2.1	2021-04-02
Location		V2.1	2021-04-02
Unit	Revised description		
Inside	Revised description		

More Information	Revised response	V2.1	2021-04-02
Deficiency 1		V2.1	2021-04-02
Deficiency Criteria	Unit & Inside: Revised deficiency criteria		
Inspection Process	Unit & Inside: Revised Observation, Request for Help, and Action		
Rationale	Unit & Inside: Revised rationales and explanations		
Deficiency 2		V2.1	2021-04-02
Rationale	Inside: Revised rationales and explanations		
Deficiency 2		V2.1	2021-04-02
Rationale	Unit & Inside: Revised rationales and explanations		
Deficiency 3		V2.1	2021-04-02
Rationale	Unit & Inside: Revised rationales and explanations		
Deficiency 1		V2.0	2020-10-28
Health and Safety Determination	Added standardized description		
HCV Pass / Fail	Field added; response input as "Fail"		
Rationale	Copy edits		
Deficiency 2		V2.0	2020-10-28
Health and Safety Determination	Added standardized description		
HCV Pass / Fail	Field added; response input as "Fail"		
Rationale	Copy edits		
Deficiency 3		V2.0	2020-10-28
Health and Safety Determination	Added standardized description		
HCV Pass / Fail	Field added; response input as "Fail"		
Rationale	Copy edits		
Overall Formatting	Complete rework of document format and layout	V1.3	2020-07-31
Definition	Revised definition	V1.3	2020-07-31
Purpose	Field added	V1.3	2020-07-31

Common Materials	Revised common materials	VI.3	2020-07-31
Common Components	Revised common components	VI.3	2020-07-31
Location	Revised inspectable locations	VI.3	2020-07-31
More Information	Field added	VI.3	2020-07-31
Deficiency 1	Separated by inspectable locations – Unit and Inside	VI.3	2020-07-31
Title	Revised title; added inspectable locations		
Deficiency Criteria	Revised deficiency criteria		
Health and Safety Determination	Revised to “Life-Threatening” determination; added standardized description		
Correction Timeframe	Field added; response input as “24 hours”		
HCV – Correction Timeframe	Field added; response input as “24 hours”		
Rationale	Revised rationale categories, types, and explanations; added standardized codes and descriptions		
Inspection Process	Revised observation, request for help, action, and more information		
Tools or Equipment	Field added to deficiency; response revised		
Deficiency 2	Separated by inspectable locations – Unit and Inside	VI.3	2020-07-31
Title	Revised title; added inspectable locations		
Deficiency Criteria	Revised deficiency criteria		
Health and Safety Determination	Revised to “Life-Threatening” determination; added standardized description		
Correction Timeframe	Field added; response input as “24 hours”		
HCV – Correction Timeframe	Field added; response input as “24 hours”		
Rationale	Revised rationale categories, types, and explanations; added standardized codes and descriptions		
Inspection Process	Revised observation, request for help, action, and more information		
Tools or Equipment	Field added to deficiency; response revised		
Deficiency 3	Separated by inspectable locations – Unit and Inside	VI.3	2020-07-31
Title	Added inspectable locations		
Deficiency Criteria	Revised deficiency criteria		
Health and Safety Determination	Revised to “Life-Threatening” determination; added standardized description		
Correction Timeframe	Field added; response input as “24 hours”		
HCV – Correction Timeframe	Field added; response input as “24 hours”		

Rationale	Revised rationale categories, types, and explanations; added standardized codes and descriptions
Inspection Process	Added more information
Tools or Equipment	Field added to deficiency; response revised
