

PLUMBING AND MECHANICAL
INTERPRETATION MANUAL



CODE: 2003 IRC

DATE:

CODE REF: G2406.2, G2443.2, G2443.3, G2443.4, G2443.5

3/31/2004

SUBJECT: Unvented Room Heaters

Question: Are unvented room heater allowed with in the dwelling.

Answer: Yes, AS outlined in the following code sections:

RG2406.2 (§FG303.3) Prohibited locations. Fuel-fired appliances shall not be located in, or obtain combustion air from, any of the following rooms or spaces:

1. Sleeping rooms.
2. Bathrooms.
3. Toilet rooms
4. Storage closets.

EXCEPTIONS: 1. Direct-vent appliances that obtain all combustion air directly from the outdoors.

2. Vented room heaters, wall furnaces, vented decorative appliances and decorative appliances for installation in vented solid fuel-burning fireplaces, provided that the room is not a confined space and the building is not of unusually tight construction.

3. A single listed wall-mounted unvented room heater equipped with an oxygen depletion safety shutoff system and installed in a bathroom provided that the input rating does not exceed 6,000 Btu per hour (1760 W/hr) and the bathroom is not a confined space.

4. A single listed wall-mounted unvented room heater equipped with an oxygen depletion safety shutoff system and installed in a bedroom provided that the input rating does not exceed 10,000 Btu per hour (2930 W/hr) and the bathroom is not a confined space.

RG2443.2 (§FG620.2) Prohibited use. One or more unvented room heaters shall not be used as the sole source of comfort heating in a dwelling unit.

RG2443.3 (§FG620.3) Input rating. Unvented room heaters shall not have an input rating in excess of 40,000 Btu/h (11.7 kW).

RG2443.4 (§FG620.4) Prohibited locations. The location of unvented room heaters shall comply with §RG2406.2.

RG2443.5 (§FG620.5) **Room or space volume. The aggregate input rating of all unvented appliances installed in a room or space shall not exceed 20 Btu/h per cubic foot (0.21 kW/m³) of volume of such room or space. Where the room or space in which the equipment is installed is directly connected to another room or space by a doorway, archway or other opening of comparable size that cannot be closed, the volume of such adjacent room or space shall be permitted to be included in the calculations.**

RG2443.6 (§FG620.6) Oxygen-depletion safety system. Unvented room heaters shall be equipped with an oxygen-depletion-sensitive safety shutoff system. The system shall shut off the gas supply to the main and pilot burners when the oxygen in the surrounding atmosphere is depleted to the percent concentration specified by the manufacturer, but not lower than 18 percent. The system shall not incorporate field adjustment means capable of changing the set point at which the system acts to shut off the gas supply to the room heater.

Conclusion: Unvented room heaters may be used provided they meet all the code requirements as outlined in the code.

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