

**1346.5304 SECTION 304 (IFGC) COMBUSTION, VENTILATION AND DILUTION AIR.**

Subpart 1. **Section 304.1.** IFGC Section 304 is amended by adding language to the end of the first paragraph to read as follows:

**304.1 General.** Refer to IFGC Appendix E for Worksheet E-1, "Residential Combustion Air Calculation Method" and Table E-1, "Residential Combustion Air Required Volume."

**Exceptions:**

1. Direct vent appliances.
2. Type 1 clothes dryers that are provided with makeup air in accordance with the manufacturer's installation instructions.
3. Replacement of fuel gas utilization equipment that complies with all of the following conditions:
  - 3.1 Replacement equipment has a Btu/hr (kW) input rating not greater than 30 percent above the original equipment input rating.
  - 3.2 Combustion air provisions meet the code requirements in effect at the time of the original installation.
  - 3.3 Replacement equipment shall not cause an existing mechanical system to become unsafe, hazardous, or overloaded.

Subp. 2. [Repealed, 34 SR 537]

Subp. 3. **Section 304.6.2.** IFGC Section 304.6.2 is amended to read as follows:

**304.6.2 One permanent opening method.** When any natural draft equipment is installed, one permanent opening, commencing within 12 inches (300 mm) of the bottom of the enclosure, shall be provided. When other than natural draft equipment is installed, one permanent opening, commencing within 12 inches (300) of the top of the enclosure, shall be provided. The equipment shall have clearances of at least 1 inch (25 mm) from the sides and back and 6 inches (160 mm) from the front of the appliance. The opening shall directly communicate with the outdoors or shall communicate through a vertical or horizontal duct to the outdoors or spaces that freely communicate with the outdoors and shall have a minimum free area of 1 inch<sup>2</sup>/3,000 Btu/hr (700 mm<sup>2</sup>/kW) of the total input rating of all equipment located in the enclosure.

Subp. 4. [Repealed, 34 SR 537]

Subp. 5. [Repealed, 34 SR 537]

Subp. 6. [Repealed, 34 SR 537]

Subp. 7. [Repealed, 34 SR 537]

Subp. 8. **Section 304.11.** IFGC Section 304.11 is amended to read as follows:

**304.11 Combustion air ducts.** Combustion air ducts shall comply with the following:

1. Ducts shall be of galvanized steel or an equivalent corrosion-resistant material. If flexible duct is used, increase the duct diameter by one inch. Flexible duct shall be stretched with minimal sags.

2. Ducts shall terminate in an unobstructed space, allowing free movement of combustion air to the appliances.

3. Ducts shall serve a single space.

4. Ducts shall not service both upper and lower combustion air openings where both such openings are used. The separation between ducts serving upper and lower combustion air openings shall be maintained to the source of combustion air.

5. Ducts shall not terminate in an attic space.

6. The remaining space surrounding a chimney liner, gas vent, special gas vent, or plastic piping installed within a masonry, metal or factory-built chimney shall not be used to supply combustion air.

**Exception:** Direct vent gas-fired appliances designed for installation in a solid fuel-burning fireplace where installed in accordance with the listing and the manufacturer's instructions.

7. Vertical ducts shall not extend through two or more stories without prior approval from the building official.

8. Ducts shall not terminate in the return air plenum of a forced air heating system unless installed in accordance with the heating equipment manufacturer's installation instructions.

9. Combustion air intake openings shall be located to avoid intake of exhaust air in accordance with IMC Section 401.5 and IFGC Section 503.8 and shall be covered with corrosion resistant screen of not less than 1/4 inch (6.4 mm) mesh.

10. Combustion air intake openings shall be located at least 12 inches (305 mm) above adjoining grade level.

11. When both makeup air and combustion air openings are required, they shall be provided through separate openings to the outdoors.

**Exception:** Combination makeup air and combustion air systems may be approved by the building official where they are reasonably equivalent in terms of health, safety, and durability.

Subp. 9. [Repealed, 34 SR 537]

**Statutory Authority:** *MS s 16B.59; 16B.61; 16B.64; 326B.101; 326B.106; 326B.13*

**History:** *29 SR 299; L 2007 c 140 art 4 s 61; art 13 s 4; 34 SR 537*

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