

American National Standard
For
**Household Cooking Gas
Appliances**

ANSI Z21.1a-2011

Preface

The standards set forth herein apply to the twenty-ninth edition of the Standard for Household Cooking Gas Appliances, ANSI Z21.1-2010, and supersede corresponding standards therein. Following their preparation by the supervising Technical Advisory Group, they were accepted by the American National Standards Institute (ANSI), and subsequently approved.

NOTE: Changes, other than editorial, are denoted by a vertical line in the margin.



Approved
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American National Standards Institute, Inc.

Standard Developer

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Addenda to American National Standard for Household Cooking Gas Appliances

Part I: Construction

1.1 Scope

1.1.7

An exhaust hood incorporated in an appliance shall comply with the applicable provisions of the *Safety Standard for Electric Fans, ANSI/UL507*. Ventilation systems with provisions to direct air in a downward direction (Air Curtain Ventilation System), although not supplied with the range or cook top, are a part of the listing of the range or cook top as outlined in section 1.28.17 and 2.33, Performance of Appliances Intended to be Utilized With Ventilations Systems That Direct Air In a Downward Direction.

1.28 Instructions

1.28.1

Each appliance shall be accompanied by clear, concise printed instructions and diagrams, stated in terms clearly understandable to the consumer, adequate for proper field assembly, installation, maintenance, safe use and operation. Instructions for testing the appliance for leaks shall be included.

The safety-related items included in the instructions shall be prominently displayed and shall precede the instructions concerning the functional use of the appliance.

The instructions shall be marked with directions to the installer to leave them with the appliance and to the consumer to retain them for future reference.

The front cover or the first page shall bear the following boxed warning. It shall be boxed as shown:

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS
 - Do not try to light any appliance.
 - Do not touch any electrical switch.
 - Do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

The letters used for the boxed statements above shall be boldfaced type having a minimum uppercase letter height of 0.120 in (3.05 mm). The minimum vertical spacing between lines of type shall be 0.046 in (1.17 mm).^{*} Lowercase letters shall be compatible with the uppercase letter size specification.

These instructions shall include:

a. For all appliances:

1. A statement that the installation must conform with local codes or, in the absence of local codes, with the *National Fuel Gas Code, ANSI Z223.1/NFPA 54*.
2. A statement that the installation of appliances designed for manufactured (mobile) home installation must conform with the *Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280* [formerly the Federal Standard for Mobile Home Construction and Safety, Title 24, HUD (Part 280)] or with local codes where applicable.
3. A statement that the installation of appliances designed for Recreational Park Trailers must conform with state or other codes or, in the absence of such codes, with the *Standard for Recreational Park Trailers, ANSI A119.5*.
4. If an external electrical source is utilized, a statement that the appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70*.

^{*} This letter height and line spacing corresponds to 12 point type.

5. A statement that:
 - (a) The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of $\frac{1}{2}$ psi (3.5 kPa).
 - (b) The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than $\frac{1}{2}$ psi (3.5 kPa).
6. Directions for the proper assembly of field-installed parts and accessories supplied with the appliance.
7. A statement to the installer that appliances equipped with casters on two (2) or more legs are for installation on $\frac{1}{8}$ in (3.2 mm) thick commercial grade vinyl composition floor finishing materials or equivalent. (See 1.4.9.)
8. A statement of the maximum gas supply pressure in accordance with the inlet pressure rating of the gas appliance pressure regulator supplied.
9. A statement of the gas supply pressure for checking the regulator setting. [The pressure stated shall be at least 1 in wc (249 Pa) above the manufacturer's specified manifold pressure.]
10. A description of proper vent installation, if applicable, and the specific type of gas vent to be used, including a statement that the vent pipe must be mechanically fastened to the flue collar and instructions for accomplishing this attachment.
11. Advice to the user on the safe use of the appliance including lighting instructions and control operation, with pictorial representations. This shall include instructions to reset all controls to the "off" position after using a programmable timing operation. For an appliance having a continuous pilot(s) in the oven, broiler or combination oven-broiler, these instructions shall include a statement that the pilot(s) must be lighted with the control dial in the "off" position (or pilot position, if provided).
12. Advice to the user on the safe use of the appliance in the event of prolonged power failure.
 - (a) For an appliance without a continuous pilot(s), for which manual ignition of pilot gas may be desired, detailed instructions for safely lighting the pilot(s).
 - (b) For an appliance that is not capable of being safely placed in operation in the event of power failure, instructions informing the user that no attempt should be made to operate the appliance during power failure.
13. Maintenance instructions (including recommended frequency guidelines) suggesting:
 - (a) Keeping appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
 - (b) Not obstructing the flow of combustion and ventilation air.
 - (c) Visually checking pilot(s) and burner flames, with pictorial representation.
 - (d) Cleaning appliance, including special oven surfaces, with recommended cleaning agents, if necessary.

- (e) Lubricating moving parts, when applicable, including type and amount of lubricant.
- 14. A statement that the maximum depth of cabinets installed above cooking tops be 13 in (330 mm) or a greater depth specified by the manufacturer as tested by the certification agency.
- 15. Information for obtaining replacement parts and where they are obtainable.
- 16. A statement that "Leak testing of the appliance shall be conducted according to the manufacturer's instructions."
- b. For floor-supported units:
 - 1. Diagrams detailing:
 - (a) For all appliances, except those incorporating room heaters, zero clearance between adjacent combustible construction below the cooking surface and the back and sides of the appliance.
 - (b) For an appliance incorporating a room heater, minimum clearance to adjacent combustible construction below the cooking surface and the back and sides of the appliance as established by performance tests (see 2.1.13).
 - (c) For all appliances, the minimum horizontal clearance in integral inches between the appliance and combustible construction extending from the cooking surface to 18 in (457 mm) or a lesser height specified by the manufacturer as tested by the certification agency above the level of the cooking surface (dimensions "A" and "B" in Figure 14, Test Structure for Floor-Supported Units Not Having Elevated Cooking Sections and Figure 15, Test Structure for Floor-Supported Units Having Elevated Cooking Sections).
 - (d) For an appliance without an elevated section, the minimum clearance in integral inches between the cooking surface and combustible construction 18 in (457 mm) or a lesser height specified by the manufacturer as tested by the certification agency above the appliance and the minimum distance in integral inches between overhead cabinets installed on either side of the appliance (dimension "D" in Figure 14, Test Structure for Floor-Supported Units Not Having Elevated Cooking Sections, but not less than the nominal width of the appliance.)
 - (e) For an appliance having an elevated cooking section, zero clearance between adjacent combustible construction and (1) the back of the appliance and (2) the sides and top of the elevated section for 13 in (330 mm) or a greater depth specified by the manufacturer as tested by the certification agency from the rear wall.
 - 2. A statement that a manual valve be installed in an accessible location in the gas piping external to the appliance for the purpose of turning on or shutting off gas to the appliance.
 - 3. Directions that any opening in the wall behind the appliance and in the floor under the appliance shall be sealed.
 - 4. For an open top broiler section or unit incorporating an integral exhaust system, the instructions shall state that a noncombustible material is to be installed on the underside of a cabinet located above the broiler section or unit in accordance with local codes, or in the absence of local codes, with the *National Fuel Gas Code, ANSI Z223.1/NFPA 54*.

5. For an appliance equipped with casters, the instructions shall state (1) that the installation shall be made with a connector that complies with the *Standard for Connectors for Movable Gas Appliances, ANSI Z21.69 • CSA 6.16*, and a quick-disconnect device that complies with the *Standard for Quick-Disconnect Devices for Use With Gas Fuel, ANSI Z21.41 • CSA 6.9*, (2) that adequate means shall be provided to limit the movement of the appliance without depending on the connector and the quick-disconnect device or its associated piping to limit the appliance movement; (3) where the restraining means shall be attached to the appliance; and (4) that if disconnection of the restraint is necessary, ensure the restraint is reconnected after the appliance has been returned to its original installed position.
 6. For appliances which may be installed according to 1.2.8, the manufacturer shall provide information as to the method of gaining access for servicing.
- c. For built-in units:
1. Diagrams detailing:
 - (a) For all appliances, clearances between adjacent combustible construction and the back of the appliance (dimension "D" in Figure 4, Test Structure for Built-In Top Surface cooking Units and Open Top Broiler Units).
 - (b) For a top unit, the minimum horizontal clearance in integral inches between the appliance and combustible construction extending from the cooking surface to 18 in (457 mm) or a lesser height specified by the manufacturer as tested by the certification agency above the cooking surface (dimensions "A" and "B" in Figure 4, Test Structure for Built-In Top Surface cooking Units and Open Top Broiler Units).
 - (c) For a top unit, the minimum distance between the front edge of the counter and the cutout opening.

If the manufacturer's installation instructions permits island installation of a top unit, the installation instructions shall address the minimum distances between the rear and side edges of the counter and the cutout opening in addition to the front distance.
 - (d) For a top unit, the minimum spacing between individual top sections.
 - (e) For an oven or broiler unit, the minimum distance between the floor and bottom of cutout opening.

(Present "2" through "4", unchanged.)

1.28.17

For gas cooking appliances that have been tested under section 2.33, Performance of Appliances Intended to be Utilized With Ventilations Systems That Direct Air In a Downward Direction, the manufacturer shall detail the brands and model numbers of those ventillation systems found acceptable.

A warning statement shall be also made that using models or brands that direct air in a downward direction other than the ones specified may lead to improper operation of the gas appliance and may result in personal injury or property damage. Ventilating systems that direct the air upwards do not have any restriction.

Instructions that if the model number ventilation hood is no longer available the owner should contact the range manufacture for acceptable replacement ventilation system model numbers.