

(c) *Fixture test.* The plumbing fixtures and connections shall be subjected to a flow test by filling them with water and checking for leaks and retarded flow while they are being emptied.

(d) *Shower compartments.* Shower compartments and receptors shall be tested for leaks prior to being covered by finish material. Each pan shall be filled with water to the top of the dam for not less than 15 minutes without evidence of leakage.

[40 FR 58752, Dec. 18, 1975, as amended at 42 FR 961, Jan. 4, 1977; 42 FR 54383, Oct. 5, 1977. Redesignated at 44 FR 20679, Apr. 6, 1979, as amended at 58 FR 55015, Oct. 25, 1993; 86 FR 2521, Jan. 12, 2021]

Subpart H—Heating, Cooling and Fuel Burning Systems

§ 3280.701 Scope.

Subpart H of this standard covers the heating, cooling and fuel burning equipment installed within, on, or external to a manufactured home.

§ 3280.702 Definitions.

The definitions in this subpart apply to subpart H only.

Accessible, when applied to a fixture, connection, appliance or equipment, means having access thereto, but which may require the removal of an access panel, door or similar obstruction.

Air conditioner blower coil system means a comfort cooling appliance where the condenser section is placed external to the manufactured home and evaporator section with circulating blower attached to the manufactured home air supply duct system. Provision must be made for a return air system to the evaporator/blower section. Refrigerant connection between the two parts of the system is accomplished by tubing.

Air conditioner split system means a comfort cooling appliance where the condenser section is placed external to the manufactured home and the evaporator section incorporated into the heating appliance or with a separate blower/coil section within the manufactured home. Refrigerant connection between the two parts of the system is accomplished by tubing.

Air conditioning condenser section means that portion of a refrigerated air cooling or (in the case of a heat pump) heating system which includes the refrigerant pump (compressor) and the external heat exchanger.

Air conditioning evaporator section means a heat exchanger used to cool or (in the case of a heat pump) heat air for use in comfort cooling (or heating) the living space.

Air conditioning self contained system means a comfort cooling appliance combining the condenser section, evaporator and air circulating blower into one unit with connecting ducts for the supply and return air systems.

Air duct means conduits or passageways for conveying air to or from heating, cooling, air conditioning or ventilation equipment, but not including the plenum.

Automatic pump (oil lifter) means a pump, not an integral part of the oil-burning appliance, that automatically pumps oil from the supply tank and delivers the oil under a constant head to an oil-burning appliance.

Btu. British thermal units means the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit.

Btuh means British thermal units per hour.

Burner means a device for the final conveyance of fuel or a mixture of fuel and air to the combustion zone.

Central air conditioning system means either an air conditioning split system or an external combination heating/cooling system.

Class 0 air ducts and air connectors means air ducts and air connectors having a fire hazard classification of zero when tested in accordance with UL 181–2003, Factory-Made Air Ducts and Air Connectors (incorporated by reference, see § 3280.4).

Class 1 air ducts and air connectors means air ducts and air connectors having a flame spread rating of not over 25 without evidence of continued progressive combustion and a smoke developed rating of not over 50 when tested in accordance with UL 181–2003, Standard for Safety Factory-Made Air Ducts and Air Connectors (incorporated by reference, see § 3280.4).

Clearance means the distance between the appliance, chimney, vent, chimney or vent connector or plenum and the nearest surface.

Combination space heating and water heating appliance means a listed unit that is designed to provide space heating and water heating from a single primary energy source.

Connector-Gas appliance means a flexible or semi-rigid connector used to convey fuel gas between a gas outlet and a gas appliance.

Direct-vent system means a system or method of construction where all air for combustion is derived directly from the outside atmosphere and all flue gases are discharged to the outside atmosphere.

Direct-vent system appliance means an appliance that is installed with a direct vent system.

External combination heating/cooling system means a comfort conditioning system placed external to the manufactured home with connecting ducts to the manufactured home for the supply and return air systems.

Factory-built fireplace means a hearth, fire chamber and chimney assembly composed of listed factory-built components assembled in accordance with the terms of listing to form a complete fireplace.

Fireplace stove means a chimney connected solid fuel-burning stove having part of its fire chamber open to the room.

Fuel gas piping system means the arrangement of piping, tubing, fittings, connectors, valves and devices designed and intended to supply or control the flow of fuel gas to the appliance(s).

Fuel oil piping system means the arrangement of piping, tubing, fittings, connectors, valves and devices designed and intended to supply or control the flow of fuel oil to the appliance(s).

Gas clothes dryer means a device used to dry wet laundry by means of heat derived from the combustion of fuel gases.

Gas refrigerator means a gas-burning appliance which is designed to extract heat from a suitable chamber.

Gas supply connection means the terminal end or connection to which a gas supply connector is attached.

Gas supply connector, manufactured home means a listed flexible connector designed for connecting the manufactured home to the gas supply source.

Gas vents means factory-built vent piping and vent fittings listed by an approved testing agency, that are assembled and used in accordance with the terms of their listings, for conveying flue gases to the outside atmosphere.

(1) *Type B gas vent* means a gas vent for venting gas appliances with draft hoods and other gas appliances listed for use with Type B gas vents.

(2) *Type BW gas vent* means a gas vent for venting listed gas-fired vented wall furnaces.

Heat producing appliance means all heating and cooking appliances and fuel burning appliances.

Heating appliance means an appliance for comfort heating, domestic water heating, or a combination of comfort heating and domestic water heating.

Liquefied petroleum gases. The terms *Liquefied petroleum gases*, *LPG* and *LP-Gas* as used in this standard shall mean and include any material which is composed predominantly of any of the following hydrocarbons, or mixtures of them: propane, propylene butanes (normal butane or isobutane), and butylenes.

Plenum means an air compartment which is part of an air-distributing system, to which one or more ducts or outlets are connected.

(1) *Furnace supply plenum* is a plenum attached directly to, or an integral part of, the air supply outlet of the furnace.

(2) *Furnace return plenum* is a plenum attached directly to, or an integral part of, the return inlet of the furnace.

Quick-disconnect device means a hand-operated device which provides a means for connecting and disconnecting a gas supply or connecting gas systems and which is equipped with an automatic means to shut off the gas supply when the device is disconnected.

Readily accessible means direct access without the necessity of removing any panel, door, or similar obstruction.

Roof jack means that portion of a manufactured home heater flue or vent assembly, including the cap, insulating

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means, flashing, and ceiling plate, located in and above the roof of a manufactured home.

Sealed combustion system appliance means an appliance which by its inherent design is constructed so that all air supplied for combustion, the combustion system of the appliance, and all products of combustion are completely isolated from the atmosphere of the space in which it is installed.

Water heater means an appliance for heating water for domestic purposes.

[40 FR 58752, Dec. 18, 1975. Redesignated at 44 FR 20679, Apr. 6, 1979, as amended at 52 FR 4586, Feb. 12, 1987; 58 FR 55015, Oct. 25, 1993; 78 FR 73987, Dec. 9, 2013]

§ 3280.703 Minimum standards.

Heating, cooling and fuel burning appliances and systems in manufactured homes shall be free of defects, and shall conform to applicable standards in the following table unless otherwise specified in this standard. (See § 3280.4) When more than one standard is referenced, compliance with any one such standard shall meet the requirements of this standard.

APPLIANCES

Heating and Cooling Equipment, Second Edition, with 1999 revisions—UL 1995, 1995.
Liquid Fuel-Burning Heating Appliances for Manufactured Homes and Recreational Vehicles, Seventh Edition, with 1997 revisions—UL 307A-1995.
Fixed and Location-Dedicated Electric Room Heaters, Second Edition, with 1998 revisions—UL 2021-1997.
Electric Baseboard Heating Equipment, Fourth Edition, with 1998 revisions—UL 1042-1994.
Electric Central Air Heating Equipment—UL 1096-Fourth Edition-1986 with revisions July 16, 1986, and January 30, 1988.
Gas Burning Heating Appliances for Manufactured Homes and Recreational Vehicles, Fourth Edition, with 1998 revisions—UL 307B-1995.
Gas Clothes Dryers Volume 1, Type 1 Clothes Dryers—ANSI Z21.5.1/-CSA 7.1-M99—1999 with Addendum Z21.5.1a-1999.
Gas Fired Absorption Summer Air Conditioning Appliances—ANSI Z21.40.1/CGA 2.91-M961996.
Gas-Fired Central Furnaces (Except Direct Vent System Central Furnaces)—ANSI Z21.47-1990 with Addendum Z21.47a-1990 and Z21.47b-1992.
Decorative Gas Appliances for Installation in Solid Fuel Burning Fireplaces—RADCO

24 CFR Ch. XX (4-1-23 Edition)

DS-010-91 (incorporated by reference, see § 3280.4).

Household Cooking Gas Appliances—ANSI Z21.1-2000.

Refrigerators Using Gas Fuel—ANSI Z21.19-1990, with Addendum ANSI Z21.19a-1992 and Z21.19b-1995.

Gas Water Heaters—Volume 1, Storage Water Heaters with Input Ratings of 75,000 BTU per hour or Less—ANSI Z21.10.1-1998 with Addendum Z21.10.1a-2000.

Household Electric Storage Tank Water Heaters, Tenth Edition—UL 174-1996, with 1997 revisions.

FERROUS PIPE AND FITTINGS

Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless—ASTM A53-93.

Standard Specification for Electric-Resistance-Welded Coiled Steel Tubing for Gas and Fuel Oil Lines—ASTM A539-1999.

Pipe Threads, General Purpose (Inch)—ANSI/ASME B1.20.1-1983.

Welding and Seamless Wrought Steel Pipe—ANSI/ASME B36.10-1979.

NONFERROUS PIPE, TUBING, AND FITTINGS

Standard Specification for Seamless Copper Water Tube—ASTM B88-93.

Standard Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service—ASTM B280-95a.

Connectors for Gas Appliances—ANSI Z21.24/CGA 6.10-M97-1997.

Manually Operated Gas Valves for Appliances, Appliance Connector Valves and Hose End Valves—ANSI Z21.15/CGA 9.1-M97-1997.

Standard for Gas Supply Connectors for Manufactured Homes—IAPMO TSC 9-1997.

Standard Specification for General Requirements for Wrought Seamless Copper and Copper-Alloy Tubes—ASTM B251-93.

Standard Specification for Seamless Copper Pipe, Standard Sizes—ASTM B42-93.

MISCELLANEOUS

Factory-Made Air Ducts and Air Connectors, UL 181, Ninth Edition, April 4, 1996, with revisions through May 15, 2003 (incorporated by reference, see § 3280.4).

Standard for Safety Closure Systems for use with Rigid Air Ducts and Air Connectors, UL 181A, 1994, with 1998 revisions.

Standard for Safety Closure Systems for use with Flexible Air Ducts and Air Connectors, First Edition—UL 181B, 1995, with 1998 revisions.

Tube Fittings for Flammable and Combustible Fluids, Refrigeration Service, and Marine Use, Sixth Edition—UL 109-1997, with 2001 revisions.

Pigtails and Flexible Hose Connectors for LP-Gas, Seventh Edition—UL 569, 1995 with 2001 revisions.