(2) All gas and oil-fired automatic storage water heaters shall have a recovery efficiency, E, and a standby loss, S, as described below. The method of test of E and S shall be as described in section 2.7 of Gas Water heaters, Vol. I, Storage Water Heaters with Input/Ratings of 75,000 BTU per hour or less, ANSI Z21.10.1–1990, with addendums Z21.10.1a–1991 and Z21.10.1b–1992 except that for oil-fired units. CF=1.0, Q=total gallons of oil consumed and H=total heating value of oil in BTU/gallon.

Storage capacity in gallons	Recovery efficiency	Standby loss
Less than 25	At least 75 percent.	Not more than 7.5 percent.
25 up to 35 ..	00	Not more than 7 percent.
35 or more ...	00	Not more than 6 percent.

(e) Each space heating, cooling or combination heating and cooling system shall be provided with at least one readily adjustable automatic control for regulation of living space temperature. The control shall be placed a minimum of 3 feet from the vertical edge of the appliance compartment door. It shall not be located on an exterior wall or on a wall separating the appliance compartment from a habitable room.

(f) *Oil-fired heating equipment.* All oil-fired heating equipment must conform to Liquid Fuel-burning Heating Appliances for Manufactured Homes and Recreational Vehicles, UL 307A—1995, with 1997 revisions, and be installed in accordance with Standard for the Installation of Oil Burning Equipment, NFPA 31–1997. Regardless of the requirements of the above-referenced standards, or any other standards referenced in this part, the following are not required:

(1) External switches or remote controls which shut off the burner or the flow of oil to the burner, or

(2) An emergency disconnect switch to interrupt electric power to the equipment under conditions of excessive temperature.

[40 FR 58752, Dec. 17, 1975, as amended at 42 FR 54383, Oct. 5, 1977. Redesignated at 44 FR 20679, Apr. 6, 1979, as amended at 47 FR 49391, Nov. 1, 1982; 52 FR 4588, Feb. 12, 1987; 52 FR 47553, Dec. 15, 1987; 58 FR 55017, Oct. 25, 1993; 70 FR 72050, Nov. 30, 2005]

§ 3280.708 Exhaust duct system and provisions for the future installation of a clothes dryer.

(a) *Clothes dryers.* (1) All gas and electric clothes dryers shall be exhausted to the outside by a moisture-lint exhaust duct and termination fitting. When the clothes dryer is supplied by the manufacturer, the exhaust duct and termination fittings shall be completely installed by the manufacturer. However, if the exhaust duct system is subject to damage during transportation, it need not be completely installed at the factory when:

(i) The exhaust duct system is connected to the clothes dryer, and

(ii) A moisture lint exhaust duct system is roughed in and installation instructions are provided in accordance with paragraph (b)(3) or (c) of this section.

(2) A clothes dryer moisture-lint exhaust duct shall not be connected to any other duct, vent or chimney.

(3) The exhaust duct shall not terminate beneath the manufactured home.

(4) Moisture-lint exhaust ducts shall not be connected with sheet metal screws or other fastening devices which extend into the interior of the duct.

(5) Moisture-lint exhaust duct and termination fittings shall be installed in accordance with the appliance manufacturer's printed instructions.

(b) *Provisions for future installation of a gas clothes dryer.* A manufactured home may be provided with ''stubbed in'' equipment at the factory to supply a gas clothes dryer for future installation by the owner provided it complies with the following provisions:

(1) The ''stubbed in'' gas outlet shall be provided with a shutoff valve, the outlet of which is closed by threaded pipe plug or cap;

(2) The ''stubbed in'' gas outlet shall be permanently labeled to identify it for use only as the supply connection for a gas clothes dryer;

(3) A moisture lint duct system consisting of a complete access space (hole) through the wall or floor cavity with a cap or cover on the interior and exterior of the cavity secured in such a manner that they can be removed by a common household tool shall be provided. The cap or cover in place shall limit air infiltration and be designed to

resist the entry of water or rodents. The manufacturer is not required to provide the moisture-lint exhaust duct or the termination fitting. The manufacturer shall provide written instructions to the owner on how to complete the exhaust duct installation in accordance with provisions of § 3280.708(a)(1) through (5).

(c) *Provisions for future installation of electric clothes dryers.* When wiring is installed to supply an electric clothes dryer for future installation by the owner, the manufacturer shall:

(1) Provide a roughed in moisture-lint exhaust duct system consisting of a complete access space (hole) through the wall or floor cavity with a cap or cover on the interior and exterior of the cavity which are secured in such a manner that they can be removed by the use of common household tools. The cap or cover in place shall limit air filtration and be designed to resist the entry of water or rodents into the home. The manufacturer is not required to provide the moisture-lint exhaust duct or the termination fitting;

(2) Install a receptacle for future connection of the dryer;

(3) Provide written instructions on how to complete the exhaust duct installation in accordance with the provisions of paragraphs (a)(1) through (5) of this section.

[42 FR 54383, Oct. 5, 1977. Redesignated at 44 FR 20679, Apr. 6, 1979, as amended at 58 FR 55018, Oct. 25, 1993]

§ 3280.709 Installation of appliances.

(a) The installation of each appliance shall conform to the terms of its listing and the manufacturer's instructions. The installer shall leave the manufacturer's instructions attached to the appliance. Every appliance shall be secured in place to avoid displacement. For the purpose of servicing and replacement, each appliance shall be both accessible and removable.

(b) Heat-producing appliances shall be so located that no doors, drapes, or other such material can be placed or swing closer to the front of the appliance than the clearances specified on the labeled appliances.

(c) Clearances surrounding heat producing appliances shall not be less than the clearances specified in the terms of their listings.

(1) Prevention of storage. The area surrounding heat producing appliances installed in areas with interior or exterior access shall be framed-in or guarded with noncombustible material such that the distance from the appliance to the framing or guarding material is not greater than three inches unless the appliance is installed in compliance with paragraph (c)(2), of this section. When clearance required by the listing is greater than three inches, the guard or frame shall not be closer to the appliance than the distance provided in the listing.

(2) Clearance spaces surrounding heat producing appliances are not required to be framed-in or guarded when:

(i) A space is designed specifically for a clothes washer or dryer;

(ii) Dimensions surrounding the appliance do not exceed three inches; or

(iii) The manufacturer affixes either to a side of an alcove or compartment containing the appliance, or to the appliance itself, in a clearly visible location, a 3″ × 5″ adhesive backed plastic laminated label or the equivalent which reads as follows:

''Warning''

This compartment is not to be used as a storage area. Storage of combustible materials or containers on or near any appliance in this compartment may create a fire hazard. Do not store such materials or containers in this compartment.

(d) All fuel-burning appliances, except ranges, ovens, illuminating appliances, clothes dryers, solid fuel-burning fireplaces and solid fuel-burning fireplace stoves, shall be installed to provide for the complete separation of the combustion system from the interior atmosphere of the manufactured home. Combustion air inlets and flue gas outlets shall be listed or certified as components of the appliance. The required separation may be obtained by:

(1) The installation of direct vent system (sealed combustion system) appliances, or

(2) The installation of appliances within enclosures so as to separate the appliance combustion system and venting system from the interior atmosphere of the manufactured home. There