(1) A steam boiler designed to operate at or below a steam pressure of 15 psig; or
(2) A hot water boiler designed to operate at or below a water pressure of 160 psig and a temperature of 250 °F; or
(3) A boiler that is designed to be capable of supplying either steam or hot water, and designed to operate under the conditions in paragraphs (1) and (2) of this definition.

Thermal efficiency for a commercial packaged boiler is determined using test procedures prescribed under § 431.86 and is the ratio of the heat absorbed by the water or the water and steam to the higher heating value in the fuel burned.


TEST PROCEDURES

§ 431.85 Materials incorporated by reference.

(a) General. We incorporate by reference the following standards into subpart E of part 431. The material listed has been approved for incorporation by reference by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Any subsequent amendment to a standard by the standard-setting organization will not affect the DOE regulations unless and until amended by DOE. Material is incorporated as it exists on the date of the approval and a notice of any change in the material will be published in the Federal Register. All approved material is available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to http://www.archives.gov/federal_register/ibr_locations.html. Also, this material is available for inspection at U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Program, 6th Floor, 950 L'Enfant Plaza, SW., Washington, DC 20024, 202-586-2945, or go to: http://www1.eere.energy.gov/buildings/appliance_standards. Standards can be obtained from the sources listed below.

(b) HI. The Gas Appliance Manufacturers Association (GAMA) merged in 2008 with the Air-Conditioning and Refrigeration Institute to become the Air-Conditioning, Heating, and Refrigeration Institute (AHRI). The Hydronics Institute BTS–2000 Testing Standard can be obtained from AHRI. For information on how to obtain this material, contact the Hydronics Institute Section of AHRI, P.O. Box 218, Berkeley Heights, NJ 07922–0218, (866) 408–3831, or go to: http://www.ahrinet.org/Content/OrderaStandard573.aspx.


(2) [Reserved]

§ 431.86 Uniform test method for the measurement of energy efficiency of commercial packaged boilers.

(a) Scope. This section provides test procedures that must be followed for measuring, pursuant to EPCA, the steady state combustion efficiency and thermal efficiency of a gas-fired or oil-fired commercial packaged boiler. These test procedures apply to packaged low pressure boilers that have rated input capacities of 300,000 Btu/h or more and are “commercial packaged boilers,” but do not apply under EPCA to “packaged high pressure boilers.”

(b) Definitions. For purposes of this section, the Department incorporates by reference the definitions specified in Section 3.0 of the HI BTS–2000, Rev 06.07 (incorporated by reference, see § 431.85), with the exception of the definition for the terms “packaged boiler,” “condensing boilers,” and “packaged low pressure steam” and “hot water boiler.”

(c) Test Method for Commercial Packaged Boilers—General. Follow the provisions in this paragraph (c) for all testing of packaged low pressure boilers that are commercial packaged boilers.

(1) Test Setup—(i) Classifications: If employing boiler classification, you must classify boilers as given in Section 4.0 of the HI BTS–2000, Rev 06.07 (incorporated by reference, see § 431.85).