

Department of Energy

§ 431.102

(c) Each standard size packaged terminal air conditioner or packaged terminal heat pump manufactured on or after September 30, 2012 and each non-standard size packaged terminal air

conditioner or packaged terminal heat pump manufactured on or after September 30, 2010, shall have an Energy Efficiency Ratio and Coefficient of Performance no less than:

Equipment class			Energy conservation standards *
Equipment	Category	Cooling capacity (British thermal units per hour [Btu/h])	
PTAC	Standard Size	<7,000	EER = 11.7
		7,000–15,000	EER = 13.8 – (0.300 × Cap**)
		>15,000	EER = 9.3
	Non-Standard Size	<7,000	EER = 9.4
		7,000–15,000	EER = 10.9 – (0.213 × Cap**)
		>15,000	EER = 7.7
PTHP	Standard Size	<7,000	EER = 11.9
		7,000–15,000	COP = 3.3
		>15,000	EER = 14.0 – (0.300 × Cap**)
	Non-Standard Size	<7,000	COP = 3.7 – (0.052 × Cap**)
		7,000–15,000	EER = 9.5
		>15,000	COP = 2.9
		<7,000	EER = 9.3
		7,000–15,000	COP = 2.7
		>15,000	EER = 10.8 – (0.213 × Cap**)
		COP = 2.9 – (0.026 × Cap**)	
		EER = 7.6	
		COP = 2.5	

* For equipment rated according to the DOE test procedure, all EER values must be rated at 95 °F outdoor dry-bulb temperature for air-cooled products and evaporatively-cooled products and at 85 °F entering water temperature for water cooled products. All COP values must be rated at 47 °F outdoor dry-bulb temperature for air-cooled products, and at 70 °F entering water temperature for water-source heat pumps.

** Cap means cooling capacity in thousand British thermal units per hour (Btu/h) at 95 °F outdoor dry-bulb temperature.

(d) Each water-cooled and evaporatively-cooled commercial package air conditioning and heating equipment with a cooling capacity at or above 240,000 Btu/h and less than 760,000 Btu/h manufactured on or after January 10, 2011, shall meet the following standard levels:

(1) For equipment that utilizes electric resistance heat or without heating, the energy efficiency ratio must be not less than 11.0.

(2) For equipment that utilizes all other types of heating, the energy efficiency ratio must be not less than 10.8.

[69 FR 61969, Oct. 21, 2004, as amended at 70 FR 60415, Oct. 18, 2005; 70 FR 61698, Oct. 25, 2005; 71 FR 71371, Dec. 8, 2006; 73 FR 58828, Oct. 7, 2008; 74 FR 12073, Mar. 23, 2009; 74 FR 36354, July 22, 2009]

Subpart G—Commercial Water Heaters, Hot Water Supply Boilers and Unfired Hot Water Storage Tanks

SOURCE: 69 FR 61983, Oct. 21, 2004, unless otherwise noted.

§ 431.101 Purpose and scope.

This subpart contains energy conservation requirements for certain commercial water heaters, hot water supply boilers and unfired hot water storage tanks, pursuant to Part C of Title III of the Energy Policy and Conservation Act, as amended, 42 U.S.C. 6311–6317.

[69 FR 61983, Oct. 21, 2004, as amended at 70 FR 60415, Oct. 18, 2005]

§ 431.102 Definitions concerning commercial water heaters, hot water supply boilers, and unfired hot water storage tanks.

The following definitions apply for purposes of this subpart G, and of subparts J through M of this part. Any words or terms not defined in this section or elsewhere in this part shall be defined as provided in section 340 of the Act, 42 U.S.C. 6311.

ASTM-D-2156-80 means the test standard published in 1980 by the American Society of Testing and Measurements and titled Method for Smoke Density in Flue Gases from Burning Distillate Fuels.