Product	Size	Energy conservation standard[a] (products manufactured on and after October 29, 2003)[b]	
		Minimum thermal efficiency	Maximum standby loss[c]
Gas-fired storage water heaters.	≤155,000 Btu/hr	80%	$Q/800 + 110(V_r)^{1/2}$ (Btu/hr)
	>155,000 Btu/hr	80%	$Q/800 + 110(V_r)^{1/2}$ (Btu/hr)
Oil-fired storage water heaters.	≤155,000 Btu/hr	78%	$Q/800 + 110(V_r)^{1/2}$ (Btu/hr)
	>155,000 Btu/hr	78%	$Q/800 + 110(V_r)^{1/2}$ (Btu/hr)
Gas-fired instantaneous water heaters and hot water supply boilers.	<10 gal	80%	N/A
	≥10 gal	80%	$Q/800 + 110(V_r)^{1/2}$ (Btu/hr)
Oil-fired instantaneous water heaters and hot water supply boilers.	<10 gal	80%	N/A
	≥10 gal	78%	$Q/800 + 110(V_r)^{1/2}$ (Btu/hr)

Product	Size	Minimum thermal insulation
Unfired hot water storage tank.	All	R–12.5

[a] V_m is the measured storage volume and V_r is the rated volume, both in gallons. Q is the nameplate input rate in Btu/hr.

[b] For hot water supply boilers with a capacity of less than 10 gallons: (1) the standards are mandatory for products manufactured on and after October 21, 2005, and (2) products manufactured prior to that date, and on or after October 23, 2003, must meet either the standards listed in this table or the applicable standards in Subpart E of this Part for a ''commercial packaged boiler.''

[c] Water heaters and hot water supply boilers having more than 140 gallons of storage capacity need not meet the standby loss requirement if (1) the tank surface area is thermally insulated to R–12.5 or more, (2) a standing pilot light is not used and (3) for gas or oil-fired storage water heaters, they have a fire damper or fan assisted combustion.

[69 FR 61983, Oct. 21, 2004; 69 FR 63574, Nov. 2, 2004]

Subpart H—Automatic Commercial Ice Makers

SOURCE: 70 FR 60415, Oct. 18, 2005, unless otherwise noted.

§ 431.131 Purpose and scope.

This subpart contains energy conservation requirements for commercial ice makers, pursuant to Part C of Title III of the Energy Policy and Conservation Act, as amended, 42 U.S.C. 6311–6317.

§ 431.132 Definitions concerning automatic commercial ice makers.

Automatic commercial ice maker means a factory-made assembly (not necessarily shipped in 1 package) that—

(1) Consists of a condensing unit and ice-making section operating as an integrated unit, with means for making and harvesting ice; and

(2) May include means for storing ice, dispensing ice, or storing and dispensing ice.

Harvest rate means the amount of ice (at 32 degrees F) in pounds produced per 24 hours.

TEST PROCEDURES [RESERVED]

ENERGY CONSERVATION STANDARDS

§ 431.136 Energy conservation standards and their effective dates.

Each automatic commercial ice maker that produces cube type ice with capacities between 50 and 2500 pounds per 24-hour period when tested according to the test standard established in accordance with section 343 of EPCA (42 U.S.C. 6314) and is manufactured on or after January 1, 2010, shall meet the following standard levels:

Equipment type	Type of cooling	Harvest rate (lbs ice/24 hours)	Maximum energy use (kWh/100 lbs ice)	Maximum condenser water use* (gal/100 lbs ice)
Ice Making Head	Water	<500	7.80–0.0055H	200–0.022H.
Ice Making Head	Water	≥500 and <1436	5.58–0.0011H	200–0.022H.
Ice Making Head	Water	≥1436	4.0	200–0.022H.
Ice Making Head	Air	<450	10.26–0.0086H	Not applicable.
Ice Making Head	Air	≥450	6.89–0.0011H	Not applicable.
Remote Condensing (but not remote compressor).	Air	<1000	8.85–0.0038H	Not applicable.
Remote Condensing (but not remote compressor).	Air	≥1000	5.1	Not applicable.