

**Department of Energy**

**§ 431.136**

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[71 FR 71372, Dec. 8, 2006]

**§ 431.134 Uniform test methods for the measurement of energy consumption and water consumption of automatic commercial ice makers.**

(a) *Scope.* This section provides the test procedures for measuring, pursuant to EPCA, the energy use in kilowatt hours per 100 pounds of ice (kWh/100 lbs ice) and the condenser water use in gallons per 100 pounds of ice (gal/100 lbs ice).

(b) *Testing and Calculations.* Determine the energy consumed and the condenser water use rate of each covered product by conducting the test proce-

dures, set forth in the Air-Conditioning and Refrigeration Institute's Standard 810-2003, "Performance Rating of Automatic Commercial Ice-Makers," section 4, "Test Requirements," and section 5, "Rating Requirements." (Incorporated by reference, see § 431.133) Do not use the formula in section 8.3 of ANSI/ASHRAE Standard 29-1988 (RA 2005) for calculating the power consumption, but instead calculate the energy use rate (kWh/100 lbs Ice) by dividing the energy consumed during testing by the total mass of the ice produced during the time period over which energy consumption is measured, normalized to 100 pounds of ice as follows:

$$\text{Energy Consumption Rate (per 100 lbs ice)} = \frac{\text{Energy Consumed During Testing (kWh)}}{\text{Mass of Ice Collected During Testing (lbs)}} \times 100\%$$

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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.
Remote Condensing and Remote Compressor .....	Air .....	<934 .....	8.85-0.0038H .....	Not applicable.
Remote Condensing and Remote Compressor .....	Air .....	≥934 .....	5.3 .....	Not applicable.
Self Contained .....	Water ...	<200 .....	11.40-0.019H .....	191-0.0315H.
Self Contained .....	Water ...	≥200 .....	7.6 .....	191-0.0315H.
Self Contained .....	Air .....	<175 .....	18.0-0.0469H .....	Not applicable.
Self Contained .....	Air .....	≥175 .....	9.8 .....	Not applicable.

H Harvest rate in pounds per 24 hours.

\*Water use is for the condenser only and does not include potable water used to make ice.

[70 FR 60415, Oct. 18, 2005; 70 FR 61698, Oct. 25, 2005]

**Subpart I—Commercial Cloths Washers**

SOURCE: 70 FR 60416, Oct. 18, 2005, unless otherwise noted.