

# AHRI Standard 811 (SI) with Addendum 1

## 2016 Standard for **Performance Rating of Automatic Commercial Ice-makers**



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# AHRI STANDARD 811-2016 WITH ADDENDUM 1

## Performance Rating of Automatic Commercial Ice-makers

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Addendum 1 of AHRI Standard 811-2016, is provided as follows. The following changes have been incorporated (deletions are shown by ~~strikethroughs~~ and additions by **shading**) into the already published 2016 version of AHRI Standard 811 to avoid confusion:

The changes include:

- 1) Edits to Section 3.2.

**3.2** ~~Bin Theoretical Storage Capacity~~ **Measured Internal Volume**. For Self-contained Model Ice-makers only, the ~~theoretical storage capacity~~ **measured internal volume** and the storage effectiveness of the ice storage bin shall be determined in accordance with AHRI Standard 821 (SI). For these models, the internal volume is the volume calculated up to the intended shut-off level. The intended shut-off level is defined as the height of the thermostat bulb; the bottom of the curtain or the height of the electric eye, depending upon the mechanism used to shut off the ice-maker.

- 2) Edits to Section 5.2.2.

**5.2.2** *Standard Ratings*. Standard Ratings shall include Bin ~~Theoretical Storage Capacity~~ **Measured Internal Volume**, Condenser Water Use Rate, Energy Consumption Rate, Ice Hardness Factor, Ice Harvest Rate and Potable Water Use Rate. To calculate Ice Hardness Factor, use Equation 1.

$$\text{Ice Hardness Factor} = \left( \frac{\text{Net Cooling Effect per kg}}{92.9 \frac{\text{kJ}}{\text{kg}}} \right) \times 100 \quad 1$$

$$I_{\text{HF}} = \left( \frac{\text{CE}_{\text{N/m}}}{K} \right) \cdot 100 \quad 1$$

Where:

CE<sub>N</sub> = Net Cooling Effect, kJ  
I<sub>HF</sub> = Ice Hardness Factor, %  
m = Mass, kg  
K = 92.9 kJ/kg (Constant)

## **IMPORTANT**

### ***SAFETY DISCLAIMER***

AHRI does not set safety standards and does not certify or guarantee the safety of any products, components or systems designed, tested, rated, installed or operated in accordance with this standard/guideline. It is strongly recommended that products be designed, constructed, assembled, installed and operated in accordance with nationally recognized safety standards and code requirements appropriate for products covered by this standard/guideline.

AHRI uses its best efforts to develop standards/guidelines employing state-of-the-art and accepted industry practices. AHRI does not certify or guarantee that any tests conducted under its standards/guidelines will be non-hazardous or free from risk.

Note:

This standard supersedes AHRI Standard 811 (SI)-2012.

For I-P ratings, see AHRI Standard 810 (I-P)-2016.