

## Food Service Program Product Requirements and Qualifications

### A. Commercial Ice Machines

This measure covers commercial ice machines that produce 60 grams (2 oz.) of lighter ice cubes, as well as flaked, crushed or fragmented ice that meets the energy efficiency thresholds by Ice Harvest Rate in the table below. Performance data is based on Air-Conditioning and Refrigeration Institute (ARI) Standard 810. Only air-cooled ice machines (self-contained or remote condensing units) are eligible. Visit [www.ari.org](http://www.ari.org) for product information and testing procedures.

| Product Type | Ice Harvest Rate Capacity * | Incentive Threshold kWh/100 lbs. of Ice (or less) |
|--------------|-----------------------------|---|
| Air-Cooled   | 101-200 lbs/day             | 9.4   |
| Air-Cooled   | 201-300 lbs/day             | 8.5   |
| Air-Cooled   | 301-400 lbs/day             | 7.2   |
| Air-Cooled   | 401-500 lbs/day             | 6.1   |
| Air-Cooled   | 501-1,000 lbs/day           | 5.8   |
| Air-Cooled   | 1,001-1,500 lbs/day         | 5.5   |
| Air-Cooled   | >1,500 lbs/day              | 5.1   |

\* Ice harvest rate (capacity in lbs.) is the amount of ice produced in 24 hours.

### B – E . Commercial Reach-In Refrigerators and Freezers

This incentive applies towards the purchase of new or replacement energy efficient commercial reach-in solid door refrigerators and freezers, and glass door reach-in refrigerators. In all categories, the refrigeration system shall be built-in (packaged), cases with remote refrigeration systems do not qualify. Used or rebuilt equipment is not eligible. Customers must provide proof (manufacturer's specification sheet) that the appliance meets the Consortium for Energy Efficiency (CEE) Tier I or Tier II energy efficiency specifications using ASHRAE Standard 117-1992 (38°F +/- 2°F). Commercial Solid Door Reach-In Refrigerators and Freezers, and Glass Door Reach-In Refrigerators

| Measure Code | Measure Description                           | CEE Maximum Daily Energy Usage                |
|--------------|---|---|
| <b>B</b>     | Solid Door Reach-In Refrigerators Tier II CEE | $\leq 0.06 \text{ V} + 1.22 \text{ kWh/day}$  |
| <b>C</b>     | Solid Door Reach-In Freezers Tier II CEE      | $\leq 0.28 \text{ V} + 0.97 \text{ kWh/day}$  |
| <b>D</b>     | Glass Door Reach-In Refrigerator Tier I CEE   | $\leq 0.12 \text{ V} + 3.34 \text{ kWh/day}$  |
| <b>E</b>     | Glass Door Reach-In Refrigerator Tier II CEE  | $\leq 0.086 \text{ V} + 2.39 \text{ kWh/day}$ |

- Low temperature covers temperatures below 0°F.
- Medium temperature refers to refrigerated space temperatures between 1°F and 35°F.

### F. Night Covers for Open Vertical and Horizontal Display Cases

Must install a cover on an otherwise open display case to decrease cooling load of the refrigerated case during off hours. The rebate is based on the linear footage of the installed night cover. It is recommended that these film type covers have small, perforated holes to decrease moisture buildup. The cover must be applied for a period of at least six hours in a 24-hour period. Customer should consider the following: using proper compressor capacity modulation mechanisms (such as variable speed drive (VSD) or cylinder un-loader); using evaporator pressure regulator (EPR) and possibly resetting to higher suction temperatures when shields are applied; resizing TXV and resetting suction pressure to a higher value. Consult with the case manufacturer or an authorized representative to determine if installing night covers will impact system performance.

### G. Strip Curtains for Walk-in Boxes

Must install new strip curtains or plastic swinging doors on doorways of walk-in boxes and refrigerated warehouses. This rebate is not available for replacement of existing strip curtains that have useful life left. Rebate is based on the square footage of the doorway.

### H. New Refrigeration Display Case with Doors (Low and Medium Temperatures)

Must replace an existing open multi-deck display case with a new high efficiency reach-in unit with standard glass doors with electronically commutated motor (ECM) fan, T-8 lamps and electronic ballast. This measure can be applied to self-contained or remote cases. New display cases are rebated based on their length. New case length must be equal to or shorter than original case.

### I. New High Efficiency Refrigeration Display Case with Special Doors (Low Temp)

A new high efficiency reach-in display case must have a minimum of 20% energy savings compared to the display case replaced. Lamps must be 800 series (CRI  $\geq 80$ ) with electronic ballast, must have ECM fan and low/no anti-sweat glass double pane doors meeting the requirements of measure J. This measure cannot be used in conjunction with measure K.

Continued On Next Page

**J. Special Doors with Low/No Anti-Sweat Heat on Low Temperature Display Cases**

Must replace an existing standard glass door of a low temperature reach-in display case with a special glass door that requires minimum to no anti-sweat heat (ASH). Doors must prevent condensation from occurring within the frame assembly. Total door rail, glass, and frame heater amperage (at 120 volts) cannot exceed 0.39 amps per foot of display case. Rebate is based on number of doors replaced. This measure cannot be used in conjunction with measure K.

**K. Anti-Sweat Heat (ASH) Controls**

Must install a device that senses the relative humidity in the air outside of the display case and reduces or turns off the glass door (if applicable) and frame anti-sweat heaters at low humidity conditions. Equivalent technologies that can reduce or turn off anti-sweat heater based on the amount of condensation formed on the inner glass pane may also qualify. This measure cannot be used in conjunction with measures I & J. Rebate is based on the total linear footage of the case.

**L. Insulation for Bare Suction Lines**

Must insulate bare refrigeration suction lines of 1 5/8 inches or less on existing equipment only. Medium temperature lines require 3/4-inch of flexible closed-cell nitrile rubber, or equivalent insulation, and low temperature lines require 1-inch of the same insulation. Insulation exposed to outside weather must be jacketed (such as with a medium-gauge aluminum jacket) or protected from the weather in some way. Rebate is based on the length, in linear feet, of the insulation installed.

**M. Door Gaskets on Solid Doors**

Must replace a worn gasket on the insulated opaque door of a walk-in or reach-in cooler or freezer. Replacement gaskets must meet the manufacturer's installation specifications, specifically regarding dimensions, materials, attachment method, style, compression, and magnetism. Rebate is based on total door perimeter in linear feet.

**N. Door Gaskets on Glass Doors**

Must replace a worn gasket on a reach-in glass door(s) of a cooler or freezer. Replacement gaskets must meet the manufacturer's installation specifications, specifically regarding dimensions, materials, attachment method, style, compression, and magnetism. Rebate is based on total door perimeter in linear feet.

**O. Auto-Closers for Main Cooler or Main Freezer Doors**

The auto-closer should be applied to the main insulated opaque door(s) of a walk-in cooler or freezer. The auto-closer must be able to firmly close that door when it is within one inch of full closure.

**P. Evaporator Fan Controller for Walk-in Coolers**

Must reduce airflow of evaporator fans in medium-temperature walk-in coolers when compressor(s) cycle off and there is no refrigerant flow through the evaporator. Must control a minimum fan load of 1/20 horsepower where the fan(s) operate continuously at full speed. Must reduce fan motor power by at least 75% during the compressor off-cycle.

Do not use if any of the following conditions apply:

- 1) The compressor runs all the time with high duty cycle;
- 2) The evaporator fan does not run at full speed all the time;
- 3) The evaporator fan motor runs on poly-phase power;
- 4) The evaporator fan motor is not shaded-pole; or
- 5) Evaporator does not use off-cycle or time-off defrost.

**Q. Vending Machine Controller**

Intended for refrigerated vending machines containing only non-perishable bottled and canned beverages. Controller must include a passive infrared occupancy sensor to turn off fluorescent lights and compressor when surrounding area is unoccupied for 15 minutes or longer. Control logic should periodically power up machine at two-hour intervals to maintain product temperature and provide compressor protection. *Refurbished vending machines that include this option are eligible.*

**R. Efficient Evaporator Fan Motor**

Applicable to existing standard efficiency shaded pole evaporator fan motor of refrigerated display cases or fan coil systems in walk-ins. Shaded pole motors to be replaced by either electronically commutated motors (ECM) or permanent-split-capacitor (PSC) motors. This measure cannot be used in conjunction with Evaporator Fan Controller Measure P.

# Food Service Program

Important: See product requirements and qualifications

| Measure Code   | Measure Description  | Rebate / Measure A  | Quantity B | Rebate A x B | Ver # DWP Use Only |
|--|--|---------------------|------------|--------------|--------------------|
| <b>A. Commercial Ice Machines</b>                                |  |                     |            |              |                    |
| REA0100  | Air Cooled 101-200 lbs per 24 hrs.                                     | \$300 / unit        |            |              |                    |
| REA0200  | Air Cooled 201-300 lbs per 24 hrs.                                     | \$300 / unit        |            |              |                    |
| REA0300  | Air Cooled 301-400 lbs per 24 hrs.                                     | \$300 / unit        |            |              |                    |
| REA0400  | Air Cooled 401-500 lbs per 24 hrs.                                     | \$300 / unit        |            |              |                    |
| REA0500  | Air Cooled 501-1,000 lbs per 24 hrs.                                   | \$400 / unit        |            |              |                    |
| REA0600  | Air Cooled 1,001-1,500 lbs per 24 hrs.                                 | \$500 / unit        |            |              |                    |
| REA0700  | Air Cooled > 1,500 lbs per 24 hrs.                                     | \$500 / unit        |            |              |                    |
| <b>B. Solid Door Reach-in Refrigerator</b>                       |  |                     |            |              |                    |
| REB0100  | Refrigerator Tier II CEE, 1 Solid Door / <19 cu. ft.                   | \$75 / unit         |            |              |                    |
| REB0200  | Refrigerator Tier II CEE, 1 Solid Door / 19-30 cu. ft.                 | \$100 / unit        |            |              |                    |
| REB0300  | Refrigerator Tier II CEE, 2 Solid Door / 31-60 cu. ft.                 | \$150 / unit        |            |              |                    |
| REB0400  | Refrigerator Tier II CEE, 3 Solid Door / 61-90 cu. ft.                 | \$225 / unit        |            |              |                    |
| <b>C. Solid Door Reach-in Freezer</b>                            |  |                     |            |              |                    |
| REC0100  | Freezer Tier II CEE, 1 Solid Door / <19 cu. ft.                        | \$100 / unit        |            |              |                    |
| REC0200  | Freezer Tier II CEE, 1 Solid Door / 19-30 cu. ft.                      | \$200 / unit        |            |              |                    |
| REC0300  | Freezer Tier II CEE, 2 Solid Door / 31-60 cu. ft.                      | \$325 / unit        |            |              |                    |
| REC0400  | Freezer Tier II CEE, 3 Solid Door / 61-90 cu. ft.                      | \$500 / unit        |            |              |                    |
| <b>D. Glass Door Reach-in Refrigerator Tier I CEE</b>            |  |                     |            |              |                    |
| RED0100  | Refrigerator Tier I CEE, 1 Glass Door / <19 cu. ft.                    | \$100 / unit        |            |              |                    |
| RED0200  | Refrigerator Tier I CEE, 1 Glass Door / 19-30 cu. ft.                  | \$125 / unit        |            |              |                    |
| RED0300  | Refrigerator Tier I CEE, 2 Glass Door / 31-60 cu. ft.                  | \$150 / unit        |            |              |                    |
| RED0400  | Refrigerator Tier I CEE, 3 Glass Door / 61-90 cu. ft.                  | \$200 / unit        |            |              |                    |
| <b>E. Glass Door Reach-in Refrigerator Tier II CEE</b>           |  |                     |            |              |                    |
| REE0100  | Refrigerator Tier II CEE, 1 Glass Door / <19 cu. ft.                   | \$125 / unit        |            |              |                    |
| REE0200  | Refrigerator Tier II CEE, 1 Glass Door / 19-30 cu. ft.                 | \$150 / unit        |            |              |                    |
| REE0300  | Refrigerator Tier II CEE, 2 Glass Door / 31-60 cu. ft.                 | \$200 / unit        |            |              |                    |
| REE0400  | Refrigerator Tier II CEE, 3 Glass Door / 61-90 cu. ft.                 | \$300 / unit        |            |              |                    |
| <b>F. Night Covers</b>   |  |                     |            |              |                    |
| REF0100  | Night Covers for Open Vertical and Horizontal Display Cases - med temp | \$9 / linear foot   |            |              |                    |
| REF0200  | Night Covers for Open Vertical and Horizontal Display Cases - low temp | \$9 / linear foot   |            |              |                    |
| <b>G. Strip Curtains</b>   |  |                     |            |              |                    |
| REG0100  | Strip Curtains for Walk-ins Boxes                                      | \$3 / square foot   |            |              |                    |
| <b>H. Reach-In Refrigeration Display Case</b>                    |  |                     |            |              |                    |
| REH0100  | New Refrigeration Display Case with Doors (Low Temp)                   | \$200 / linear foot |            |              |                    |
| REH0200  | New Refrigeration Display Case with Doors (Medium Temp)                | \$150 / linear foot |            |              |                    |
| <b>I. Reach-In Refrigeration Display Case With Special Doors</b> |  |                     |            |              |                    |
| REI0100  | New High Eff. Refrigeration Display Case with Special Doors (Low Temp) | \$200 / linear foot |            |              |                    |
| <b>J. Special Doors with Low/No Anti-Sweat Heat</b>              |  |                     |            |              |                    |
| REJ0100  | Special Doors with Low/No Anti-Sweat Heat on LowTemp Display Case      | \$50 / door         |            |              |                    |
| <b>K. Anti-Sweat Heat (ASH) Controls</b>                         |  |                     |            |              |                    |
| REK0100  | Anti-Sweat Heat (ASH) Controls   | \$14 / linear foot  |            |              |                    |
| <b>L. Insulation for Bare Suction Lines</b>                      |  |                     |            |              |                    |
| REL0100  | Insulate Bare Suction Pipes  | \$1 / linear foot   |            |              |                    |
| <b>M. Door Gaskets on Solid Doors</b>                            |  |                     |            |              |                    |
| REM0100  | Door Gaskets on Solid Doors for Coolers                                | \$4 / linear foot   |            |              |                    |
| REM0200  | Door Gaskets on Solid Doors for Freezers                               | \$4 / linear foot   |            |              |                    |
| <b>N. Door Gaskets on Glass Doors</b>                            |  |                     |            |              |                    |
| REN0100  | Door Gaskets on Glass Doors  | \$4 / linear foot   |            |              |                    |
| <b>O. Auto-Closers for Main Cooler or Main Freezer</b>           |  |                     |            |              |                    |
| REO0100  | Auto-Closer for Main Cooler Doors                                      | \$40 / closer       |            |              |                    |
| REO0200  | Auto-Closer for Main Freezer Doors                                     | \$50 / closer       |            |              |                    |
| <b>P. Evaporator Fan Controller for Walk-In Coolers</b>          |  |                     |            |              |                    |
| REP0100  | Evaporative Fans Controller for Walk-in Coolers                        | \$75 / controller   |            |              |                    |
| <b>Q. Vending Machine Controller</b>                             |  |                     |            |              |                    |
| REQ0100  | Vending Machine Controller   | \$90 / controller   |            |              |                    |
| <b>R. Efficient Evaporator Fan Motor</b>                         |  |                     |            |              |                    |
| RER0100  | Efficient Evaporator Fan Motor - Electronically Controlled Motor (ECM) | \$20 / motor        |            |              |                    |
| RER0200  | Efficient Evaporator Fan Motor - Permanent Split Capacitor (PSC) Motor | \$20 / motor        |            |              |                    |
| <b>Total Food Service Rebate</b>                                 |  |                     |            | \$           |                    |