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**Please work with your EnergySmart Grocer (ESG) Account Manager to identify additional, custom energy efficiency opportunities. These custom opportunities shall be submitted by the ESG Program to Avista for review and approval.**

**These terms and conditions are subject to change without notice.** All measures require a pre-install inspection by a program representative. Please check with your Account Manager to confirm that your proposed installation meets terms and conditions or call 1.800.230.9420 to speak with a program representative. If you have a custom measure that yields equal or greater energy savings, you may request an engineering review to determine whether it qualifies for a rebate.

**Disclaimer:** The selection, purchase, and ownership of the equipment are the sole responsibility of the customer. The EnergySmart Grocer Program makes no representation as to the safety, reliability, and/or efficiency of the equipment selected or components thereof. The EnergySmart Grocer Program makes no warranty, expressed or implied, for any particular purpose, use or application of the equipment.

## Case Lighting Retrofits

### 1. LED Case Lighting Retrofits

<u>Pre-Retrofit Requirements</u>	<u>Post-Retrofit Requirements</u>
<p>T8, T10 or T12 Fluorescent lamps operating with electronic or magnetic ballasts</p>	<p>Must install a LED lighting system in lieu of a fluorescent lighting system in an existing reach-in or open multi-deck refrigerated case.</p> <p>The installed product must appear on the Design Lights Consortium Qualified Products List (QPL), or the Lighting Design Lab (LDL)</p> <p>LEDs must be rated for at least 50,000 lifetime hours</p> <p>A low power LED is defined as <math>\leq 4.5W</math> per linear ft,</p> <p>A high power high LED is defined as one <math>&gt;4.5W</math> per linear ft.</p> <p>T10 lamps will be treated as T12 lamps for calculating rebate values.</p> <p>The total number of feet of LEDs rebated shall not exceed the total number of feet of fluorescent lamps replaced.</p>
<p><b>Notes:</b> A luminaire that is modified and can no longer accept the original lamps must have a visible label affixed to the altered luminaire indicating the modified luminaire and can no longer operate originally intended lamp(s). All materials, including PCB ballasts, must be disposed of or recycled in accordance with current environmental laws.</p> <p>Drop in replacement LED tubes must use manufacturer recommended ballast and driver type.</p> <p>Outside lamp is defined as lamps located on an open multi deck case canopy or rail.</p> <p>Inside lamp is defined as lamps located on an open multi deck case shelf or inside of a reach-in case.</p>	
<p><b>Recommendations</b></p> <p>Program recommends that products be selected from the following Qualified Products List (QPL), have a 5 Year manufacturer product warranty and have an efficacy of at least 80 lumens/Watt.</p> <p><a href="http://www.designlights.org">www.designlights.org</a></p> <p><a href="http://www.lightingdesignlab.com">www.lightingdesignlab.com</a></p>	
<p><b>Units:</b> Ln Ft of LED</p>	<p><b>Pre-Inspection Required:</b> No</p>
<p><b>Measure Life:</b> 8 years</p>	<p><b>Rebate:</b></p> <p><u>Single to Single Lamp Replacements:</u></p> <ul style="list-style-type: none"> <li>• MT Case: T8 to LP LED Inside Lamp = \$10.00/Ln Ft</li> <li>• MT Case: T12 to LP LED Inside Lamp = \$10.00/Ln Ft</li> <li>• LT Case: T8 to LP LED Inside Lamp = \$10.00/Ln Ft</li> <li>• LT Case: T12 to LP LED Inside Lamp = \$10.00/Ln Ft</li> <li>• MT Case: T8 to LP LED Outside Lamp = \$7.00/Ln Ft</li> <li>• MT Case: T12 to LP LED Outside Lamp = \$7.00/Ln Ft</li> </ul> <p><u>Double to Single Lamp Replacements:</u></p> <ul style="list-style-type: none"> <li>• MT Case: 2 T8 to 1 HP LED Inside Lamp = \$18.00/Ln Ft</li> <li>• MT Case: 2 T12 to 1 HP LED Inside Lamp = \$18.00/Ln Ft</li> <li>• LT Case: 2 T8 to 1 HP LED Inside Lamp = \$18.00/Ln Ft</li> <li>• LT Case: 2 T12 to 1 HP LED Inside Lamp = \$18.00/Ln Ft</li> <li>• MT Case: 2 T8 to 1 HP LED Outside Lamp = \$10.00/Ln Ft</li> <li>• MT Case: 2 T12 to 1 HP LED Outside Lamp = \$10.00/Ln Ft</li> </ul>

## Controls

### 2. Anti-Sweat Heater (ASH) Controls

Must install a device that controls the ASH load of reach-in doors. This measure is relevant for both MT and LT reach-in glass door cases

<u>Existing Equipment Requirements</u>	<u>Replacement Equipment Requirements</u>
<p><b>Medium Temperature Case:</b> Uncontrolled ASH present &gt; 0.20 amps/ft. of case (door rail, glass and/or frame heating element combined)</p>	<p>Must automatically modulate door ASH output based on environmental conditions (relative humidity) as measured by a sensor that is part of the control system</p>
<p><b>Low Temperature Case:</b> Uncontrolled ASH present &gt; 0.39 amps/ ft. of case (door rail, glass and/or frame heating element combined)</p>	

**Exclusions:**

An additional separate rebate cannot be claimed for Standard Doors to Low/No Anti-Sweat Heat Doors for Low Temperature Reach-ins.

This measure only applies to technologies that reduce energy consumption of anti-sweat heaters based on sensing humidity. It does not apply to doors equipped with low/no anti-sweat heat.

**Additional Information:**

The ASH controller is expected to reduce the runtime on LT and MT cases by 50%.

If there is no amp tag for the case door, please call program staff to help qualify the case or door frame.

**Units:** Linear feet of case

### 3. Walk-in Evaporator Fan Control – ECM -- Low & Medium Temperature

Must install controls that reduce energy consumption of evaporator fan motors in walk-ins by reducing fan speed when there is no refrigerant being delivered to the evaporator.

<u>Existing Equipment Requirements</u>	<u>Replacement Equipment Requirements</u>
Electronically Commutated Motor (ECM)	Same
Evap fan motor size (nameplate rated output power): 1/20th HP to 1/10th HP	Evap fan motor size (nameplate rated output power): 1/20th HP to 1/10th HP
Evap fan full speed runtime: full speed 24hrs/day except if off for defrost periods	Evap fan full speed runtime: full speed only during call for cooling (compressor on or liquid-line solenoid open)
Evap fan full speed: 1,550 RPM	Evap fan full speed: 1,550 RPM
Evap fan low speed: N/A	Evap fan low speed: 500<=RPM>=600
	Alternative to low speed: On/Off Cycling. During periods when there is no refrigerant being delivered to the evaporator, eligible controllers may cycle the fans off only if they turn the fans on periodically during that time to circulate air in the walk-in (not more than 1 minute every 8 minutes or 13% of time).

**Exclusions:**

Not applicable if Evaporator Fan Control is already installed.

On walk-in refrigeration circuits served by multiplex systems, liquid-line solenoid is required for adequate control; multiplex systems without liquid-line solenoid on the walk-in circuit are not eligible.

**Units:**

Motor controlled

**4. Floating Head Pressure Control on Single Compressor Systems**

Must convert the head pressure controls of an existing single compressor system from fixed control to floating control. Applicable to either condensing unit or remote condensing refrigeration systems.

<u>Existing Equipment Requirements</u>	<u>Replacement Equipment Requirements</u>
Fixed pressure head control valve	Must replace any non-adjustable flood-back control valve with adjustable flood- back control valve (head pressure control valve) to lower minimum condensing head pressure from 180 psig (93 F for R22) to saturated pressure equivalent of 70 F or less. Alternatively, a fan control safety switch can be used to maintain adequate head pressure.
Expansion valve	To prevent evaporator from starving at low condensing pressures, one of the following must be implemented: <ul style="list-style-type: none"> <li>- Replace each expansion valve with balanced-port valve or electronic expansion valve (EEV) sized to meet the load requirement at 70° F condensing temperature</li> <li>- Install a device to supplement refrigerant feed to each evaporator attached to the condenser.</li> </ul> Exemption: Existing expansion valve is a balanced port or electronic expansion valve.
Compressor motor nameplate indicates motor is 1 HP or more	Same
A single compressor serves suction group	Same
Condenser intake air must be from outside ambient air	Same

**Strip Curtains and Gaskets**

**5. Strip Curtains**

Must install new strip curtains or plastic swinging doors on qualifying walk-in doorways.

<u>Existing Equipment Requirements</u>	<u>Replacement Equipment Requirements</u>
No strip curtains installed	Strip curtains $\geq 0.06$ inches thick
	Low temp strip curtains must be used on low temp applications.

**Exclusions:**

Rebate is only eligible for applications in supermarket walk-in freezers & coolers, convenience store freezers and restaurant walk-in freezers. A supermarket is defined as a  $\geq 10,000$  sq ft self-service commercial retail food service facility. A restaurant is defined as a commercial retail facility with the majority sales resulting from prepared food.

This measure is eligible for a **one-time incentive** only. Measure is not eligible for equipment with strip curtains included in a maintenance contract, providing regular upkeep/replacement. Rebate is not available for replacement of existing strip curtains, or application of strip curtains on display cases, or restaurant walk-in freezers located inside of walk-in coolers.

Rebate is not available for other facility types such as drug stores.

**Notes:** Rebates are only available to certified strip curtain trade allies. If you are interested in certification information, please contact the Program at 800-230-9420.

**Units:** Square feet of doorway (measured inside door frame)

**6. Door Gaskets for Solid or Reach-In Glass Doors**

Applicable to main insulated solid door(s) of walk-in cooler or freezer that open to ambient temperatures and/or standard size reach-in glass or solid door(s) of a low or medium temperature display case.

**Existing Equipment Requirements**

Worn or damaged gasket (and/or door sweep) with degradation sufficient to create an air gap (leak) equal to or greater than 6 inches in length.

**Replacement Equipment Requirements**

Replacement gaskets and/or door sweep must meet the manufacturer's specifications regarding dimensions, materials, attachment method, style, compression, and magnetism.

**Exclusions:** Under counter half coolers, freezers, or beverage merchandisers do not qualify for rebates.

This measure is eligible for a **one-time incentive only**. Measure is not eligible for equipment with gaskets included in a maintenance contract providing regular upkeep/replacement.

**Units:** Door

**Motors**

**7. ECMs - Replace Shaded Pole Fan Motors in Refrigerated Display Cases**

Applicable to existing shaded pole evaporator fan motors in refrigerated display cases.

**Existing Equipment Requirements**

Shaded pole motor in display case

**Replacement Equipment Requirements**

Electronically Commutated Motor (ECM) in display case

**Units:** Motor

**8. ECMs - Replace Shaded Pole Fan Motors in Walk-in Coolers or Freezers**

Applicable to existing shaded pole evaporator fan motors in refrigeration system evaporators in walk-in coolers or freezers.

**Existing Equipment Requirements**

**Replacement Equipment Requirements**

Shaded pole motor in walk-in evaporator

Electronically Commutated Motor (ECM) in walk-in evaporator

**Exclusions:** Not applicable for motors with fans less than 10" in diameter.

Not applicable if Evaporator Fan Control is already installed.

**Recommendations:** This measure may be combined with "Walk-in Evaporator Fan Control – ECM" measure for additional energy savings and rebate. See measure #3.

**Units:** Motor