



RAPID REBATES GUIDE

For Commercial Buildings

2023 Version 1.2
Applicable beginning Jan 16, 2023



Rapid Rebates offer a streamlined approach for Customers to receive cash incentives for specific energy efficiency upgrades with established energy savings.

Please review the requirements for each rebate carefully as some Rapid Rebates require a pre-inspection, which must be completed by Willdan prior to removing any existing equipment.

Rapid Rebate applications must be submitted to CEEP within 90 days of the project's installation date or before November 15 of that program year, whichever is sooner.

Qualifying criteria and rebate amounts are subject to change and will be posted to our website. You may also place a reservation for your Rapid Rebate, which will be valid for 180 days.

Projects cannot receive rebate payments from more than one California investor-owned utility or third-party energy efficiency program for the same product, equipment, or service (e.g., "double dipping"), including point of sale "midstream" and "upstream" rebates.

All participating trade professionals are responsible for ensuring availability for post-installation inspections if requested by SCE.

Projects not listed within this catalog may still be eligible through our Custom Rebates Program.

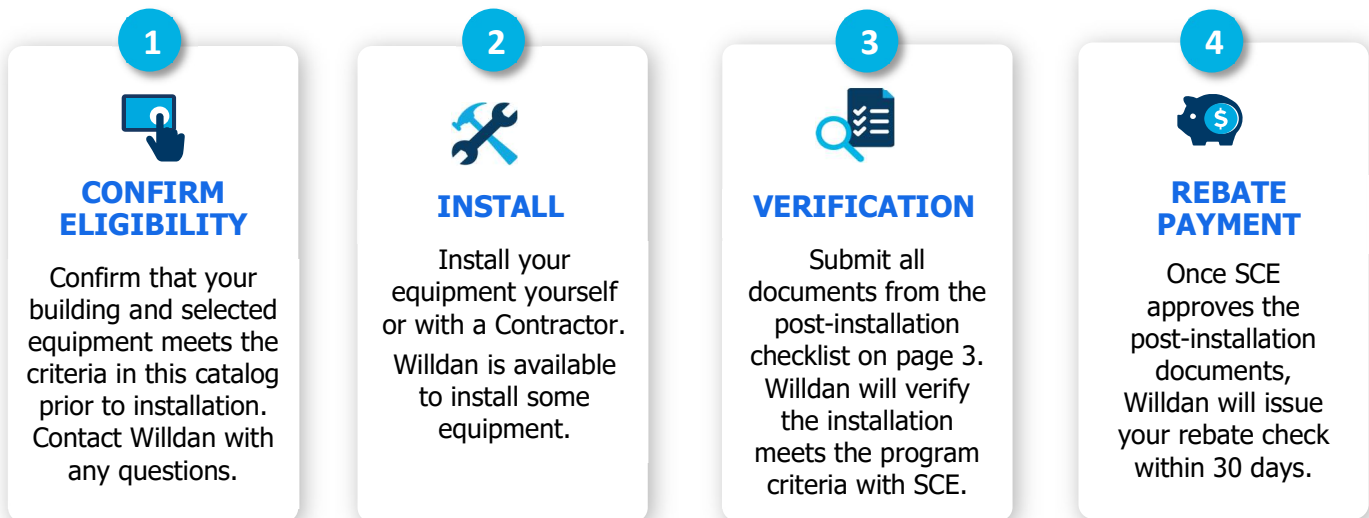
Please visit our website for program terms and conditions.

To Be Eligible:

- ✓ Existing commercial customer served by Southern California Edison (SCE)
- ✓ Monthly electrical demand greater than 20 kW over the most recent 12-months
- ✓ Projects must be in existing areas of existing buildings and cannot be part of additions, major remodels, or capacity expansions.



Process Overview



Project Document Checklist

The following documents are required to process your Rebate application for every project.

1. SCE Customer information:
 - Service Account Number or copy of SCE bill
 - SCE Customer contact name, address, email, and phone number
2. Contractor invoice showing:
 - material cost
 - installation labor cost, if applicable
 - serial numbers for units installed
 - rebate received by customer per line item
3. Specification sheet(s) for units installed
4. Rebate Payee's W-9 (this may be the Customer or the Contractor, if assigned by the Customer)
5. Photos
 - Must be clearly labeled to identify the specific equipment captured in the photo and which requirement the photo is intended to fulfill
 - Existing equipment/conditions (location, nameplate, etc.)
 - New equipment (location, nameplate, etc.)
 - Clear evidence supporting all Data Requirements listed for each measure in this catalog (along with any additional mentioned documentation requirements)
 - Clear evidence the measure did not violate terms stated in "Restrictions" sections
 - Please contact Willdan with any questions or to ensure that proper documentation is being collection PRIOR to measure installation
6. Customer-signed Customer-Implementer Agreement (CIA).
 - This is the "rebate application," and provides a section for the Customer to assign rebate payment to Contractor/Trade Pro
 - Willdan will provide this for signature after items 1 – 5 are received.
7. Other required project documents may be specified within the requirements, restrictions, and data collection sections specified for each measure later in this document.

Rapid Rebate Energy Efficiency Measure List

Measure Description	Rebate per	Rebate	Page	
Lighting				
Efficient 4-foot UL Type A TLED T8 lamp	Lamp	\$1.90 - \$3.00	5	
Efficient 4-foot UL Type B TLED T8 lamp	Lamp	\$2.00 - \$4.00	6	
High Bay and Low Bay LED Light Fixtures	Fixture	\$2.00 - \$9.00	8	
Refrigeration				
Anti-Sweat Heater (ASH) Controls	Low Temp (Freezer)	Linear Feet	\$30.00	10
	Medium Temp (Cooler)	Linear Feet	\$15.00	10
Auto Door Closer (ADC) for Walk-In Units	Low Temp (Freezer)	Unit	\$350.00	10
	Medium Temp (Cooler)	Unit	\$250.00	10
Glass Door Retrofits for Medium-Temp Open Vertical Refrigerated-Cases	without LED Lighting	Linear Feet	\$30.00	12
	with LED Lighting	Linear Feet	\$40.00	12
HVAC				
Add VFD & other Enhanced Ventilation to Single-Zone DX HVAC Unit	Rated Tons	\$30.00 - \$50.00	13	
Unoccupied fan control, AC only unit	Rated Tons	\$10.00	16	
Unoccupied fan control, AC unit with gas heat	Rated Tons	\$10.00	16	
Unoccupied fan control, heat pump	Rated Tons	\$15.00	16	
Unoccupied fan control, variable volume AC unit with gas heat	Rated Tons	\$15.00	16	
VSD on HVAC supply fan control	Rated HP	\$85.00	17	
VFD on condenser water pump, in Hotels	Rated HP	\$60.00	17	
VFD on condenser water pump, in other eligible building types	Rated HP	\$35.00	17	
High efficiency PTAC (non res) DX equipment <= 24 kBtu/hr	kBTU/hr	\$1.75	18	
High efficiency PTHP (non res) DX equipment <= 24 kBtu/hr	kBTU/hr	\$1.75	18	
Software-controlled Switched Reluctance Motor	Rated HP	\$5.00	18	
Variable-Speed Centrifugal Chiller, in Hotels or Nursing Homes	Rated Tons	\$3.00	19	
Variable-Speed Centrifugal Chiller, in other Eligible Building Types.	Rated Tons	\$2.00	19	
Variable-Speed Screw Chiller, in Hotels or Nursing Homes	Rated Tons	\$3.00	19	
Variable-Speed Screw Chiller, in other Eligible Building Types	Rated Tons	\$2.00	19	
Food Service				
Kitchen Hood Demand-Controlled Ventilation	Rated HP	\$265.00	20	

Type A TLED Replacing Fluorescent T8

Measure Description	Measure ID	Rebate	Rebate per
Efficient 4-foot UL Type A TLED T8 lamp, Indoor	SWLG009A	\$3.00	Lamp
Efficient 4-foot UL Type A TLED T8 lamp, Parking Garage	SWLG009B	\$1.90	Lamp

Requirements

- Existing fluorescent T8 lamp and associated electronic ballast must be functioning and operating as intended. Ballast cannot be replaced as part of the project.
- New TLED must be:
 - 4-foot and designated as UL Type A or UL Type A+B, but must be configured as a UL Type A.
 - listed in the current Design Lights Consortium (DLC) qualified product list at the time of sale under the Primary Use Category "Replacement Lamps ("plug and play") (UL Type A)" or "Dual Mode Internal Driver (UL Type A and Type B)."
 - achieve or exceed the following performance requirements, as verified by the DLC:

Performance Metric	Minimum Requirements
Lamp Efficacy	≥ 145 LPW
CRI	≥ 80
CCT	2,200 K – 6,500 K
Power Factor	≥ 0.9
Total Harmonic Distortion	≤ 20%
Lumen Maintenance	L70 ≥ 50,000
Minimum Warranty	5 years

- Ballast compatibility criteria:
 - TLED must be able to operate from an electronic instant start ballast.
 - TLED specification sheet must list all compatible ballast model numbers to allow program administrators to verify compatibility.
 - TLED T8 Lamp must be installed in a fixture using a ballast found on its compatible ballast list. If the existing ballasts are not listed on the compatible ballast list, the following criteria must be met to qualify for a rebate:
 - TLED must be installed in a manner that is consistent with all requirements on its specification sheet.
 - Ballast must be certified by independent test labs for compatibility, then certification must be submitted with the rebate application.
 - If a lab certification is not available, a letter from manufacturer showing ballast compatibility must be submitted with the rebate application

Restrictions

- The following building types are not eligible: Hotels/motels, Assembly, and Education
- TLEDs designed to operate with magnetic or non-instant-start electronic ballasts are not eligible.
- De-lamping and re-ballast are not eligible.
- Replacements of lamps other than 4-foot linear fluorescent T8 lamps are not eligible.

Additional Data Required for Rebate

- Total Number of fixtures and lamps
- Number of fixtures sampled (at least 10% of total) for:
 - Fluorescent lamp wattage
 - Number of lamps and ballasts per fixture

- Ballast manufacturer and model number
- Disposal method of existing tube lamp (cannot be refurbished and sold)
- Confirmation that existing equipment has at least one year of remaining useful life
- Building vintage
- Manufacturer cut sheet showing ballast compatibility
- Required photos (please see Project Document Checklist on Page 3)
- Completed TLED Replacement Customer Questionnaire (provided on Willdan’s website or please email CEEP@willdan.com)

Type B TLED Replacing Fluorescent T8

Measure Description	Measure ID	Rebate	Rebate per
Efficient 4-foot UL Type B TLED T8 lamp, Indoor, Building Group A	SWLG018A	\$4.00	Lamp
Efficient 4-foot UL Type B TLED T8 lamp, Indoor, Building Group B	SWLG018A	\$2.00	Lamp
Efficient 4-foot UL Type B TLED T8 lamp, Parking Garage	SWLG018B	\$2.30	Lamp

Building Group A	Building Group B
Grocery Hospital / Nursing Home Restaurants Retail (3-story) Refrigerated Warehouses	Office Retail (Small + Large) Warehouse / Storage

Requirements

- Existing fluorescent lamp and associated electronic ballast must be functioning.
- New TLED must be:
 - 4-foot and designated as UL Type B or UL Type A+B
 - installed in a Type B configuration with the existing ballast removed
 - listed in the current Design Lights Consortium (DLC) qualified product at the time of sale under the Primary Use Category “Internal Driver/Line Voltage (UL Type B) Lamps” or “Dual Mode Internal Driver (UL Type A and Type B)”.
 - compatible with the lighting system controls. For example, if the lighting system includes dimming controls, the new LED tube must be dimmable and compatible with the installed dimming system.
 - Achieve or exceed the following performance requirements, as verified by the DLC:

Performance Metric	Minimum Requirements
Lamp Efficacy	160 LPW
CRI	≥ 80
CCT	2,200 K – 6,500 K
Power Factor	≥ 0.9
Total Harmonic Distortion	≤ 20%
Lumen Maintenance	L70 ≥ 50,000
Minimum Warranty	5 Years

Restrictions

- The following building types are not eligible: Hotels/motels, Assembly, and Education
- Existing lamps and ballasts must be properly disposed. “Abandon-in-place” demolition of existing ballasts is prohibited.

- De-lamping is not eligible.
- Replacements of lamps other than 4-foot linear fluorescent T8 lamps are not eligible.

Additional Data Required for Rebate

- Total number of fixtures and lamps
- Number of fixtures sampled (at least 10%) for:
 - Fluorescent lamp wattage
 - Number of lamps and ballasts per fixture
- Disposal method of tube
- Existing automated control types in each retrofitted space
- Required photos (please see Project Document Checklist on Page 3)
- Completed TLED Replacement Customer Questionnaire (provided on Willdan’s website or please email CEEP@willdan.com)
- Confirmation that existing equipment has at least one year of remaining useful life
- Documentation demonstrating compliance with Title 24 requirements
- Customer confirmation that the existing automated control functionality remained intact after installation

Title 24 Code Compliance

- All projects will require evidence of T24 compliance or exemption. The customer, contractor, and/or may need to collect additional information to assist with the compliance verification process, including photos and detailed area sizes and characteristics.
- Most applications will require auto shut off controls for the installed equipment.
- The customer and/or installing contractor are responsible for Title 24 compliance and permitting. State and federal standards related this measure are summarized in the table below:

Code	Effective Date
CA Appliance Efficiency Regulations – Title 20, Section 1605 (j) and (k)	July 2021
CA Building Energy Efficiency Standards – Title 24, Section 130.1 Section 141.0(b)	January 1, 2023
Federal Standards, 10 CFR 430.32(m) and (n)	July 14, 2021

Important Excerpts from Title 24 (2022)

- Since UL Type B and Type C offerings involve removing and replacing both existing lamps and ballasts with unlike equipment, they are considered alterations. Based on factors such as the number of luminaires retrofitted and size of building, these offerings qualify as either “One-for-One Alterations” (§141.0(b)2Iiii) or “Entire Luminaire Alterations” (§141.0(b)2Ii) and (§141.0(b)2Iii).
- Depending on the type of alteration, the new LED power draw may trigger some Title 24 controls requirements, such as multi-level control (§130.1(b)) and automatic shutoff controls (§130.1(c)1-8).

If Title 24 is triggered, the following must be submitted:

- Documentation that the retrofitted space has achieved a lighting power density (LPD) that is < 80% of allowable LPD for that space type.
- Documentation verifying the existence of required controls
- Customer certification that any existing automated control functionality remains intact after installation.

The following are typically exempt from Title 24:

- Retrofitting < 10% of luminaires in an enclosed space does not trigger code. However, verification of this exemption requires knowledge about the total number of luminaires in the space in question.
- Retrofitting 50 or less luminaires per floor or tenant space, or in enclosed locations with only one luminaire then it does not trigger code.

LED High/Low Bay Lighting Replacement

Lumens	14,800 to <18,500	18,500 to <23,100	23,100 to <30,000	30,000 to <39,000	39,000 to <50,700	50,700 to <65,900
LPW	≥155	≥155	≥155	≥155	≥155	≥155
Measure ID SWLG011	G	H	I	J	K	L
Building Group A	\$3.00	\$4.00	\$5.00	\$5.00	\$7.00	\$9.00
Building Group B	\$2.00	\$3.00	\$4.00	\$4.00	\$5.00	\$7.00

Group A	Group B
Grocery	Restaurant
Hospital / Nursing Home	Office
Hotel / Motel	Storage (conditioned)
Warehouse (refrigerated)	Retail (small)
Retail (large)	Education

Requirements

- The new luminaire must produce equivalent lumens to the existing luminaire and must have a lower total wattage.
- The LED fixture or retrofit kit must be on the DesignLight Consortium (DLC) qualified product list (QPL) at the time of sale and be listed under the General Category "High Bay" and under one of the following Primary Use Designations:
 - High-Bay Aisle Luminaires
 - High-Bay Luminaires for Commercial and Industrial Buildings
 - Low-Bay Luminaires for Commercial and Industrial Buildings
 - Retrofit Kits for High-Bay Luminaires for Commercial and Industrial Buildings
 - Retrofit Kits for Low-Bay Luminaires for Commercial and Industrial Buildings
- In addition to the lumen and LPW requirements listed in the table above, the equipment must meet the following minimum requirements to be listed on the DLC QPL -bay and low-bay categories:
 - 50,000-hour L70 Lumen Maintenance
 - ≥ 70 Color Rendering Index (CRI)
 - ≤ 5700 Kelvin Correlated Color Temperature (CCT)
 - ≥ 30% of lumen Output in the 20° - 50° zone (higher for Aisle Lighting)
- Additional Requirements for DLC Premium above the Standard level for the high-bay and low-bay categories include:
 - 36,000-hour L90 Lumen Maintenance

Restrictions

- Assembly building types are not eligible
- The following products and installation types are not eligible for rebates:
 - Fixtures listed under specialty primary uses on the DLC qualified product list (QPL)
 - Horticultural installations
 - Exterior installations



- Screw-based lamps
- Tube LEDs (TLEDs)

Title 24 Code

- All projects will require evidence of T24 compliance or exemption. The customer, contractor, and/or may need to collect additional information to assist with the compliance verification process, including photos and detailed area sizes and characteristics.
- The customer and/or installing contractor are responsible for Title 24 compliance and permitting. Please see the Title 24 Code Section under Type B TLED Lighting for additional information.
- Most applications will require auto shut off controls for the installed equipment.

Anti-Sweat Heater (ASH) Controls for Display Cases

Measure Description	Measure ID	Rebate	Rebate per
ASH Controls for Low Temp (Freezer) Display Case	SWCR001A	\$30.00	Linear Feet
ASH Controls for Medium Temp (Cooler) Display Case	SWCR001B	\$15.00	Linear Feet

Requirements

- Display case must be equipped with humidity-sensing controls that reduce the amount of power supplied to the heaters as the store dew point temperature decreases.
- Power reduction should decrease by at least 2% for every percentage the humidity falls below 55%. Equivalent technologies that can reduce or turn off ASHs based on the amount of condensation formed on the inner glass pane may also qualify.
- The existing electric-resistance anti-sweat heater operates at full power, 100% of the time.

Restrictions

- This rebate cannot be applied in conjunction with a rebate for new refrigeration display case doors.
- This measure cannot be used in conjunction with a rebate for new special display doors with low/no anti-sweat heat on low-temperature display case.

Additional Data Required for Rebate

- Age of the building, refrigeration system, and display case
- Total # of low temperature controllers and medium temperature controllers installed
- Nameplate photo that shows the manufacture date for the display case(s). If unavailable a customer-signed attestation may be accepted.
- Photo of each aisle/area where ASH controls are installed
- Photos of humidity sensors with case content in picture
- Photos of ASH controller that includes brand name, wiring, and case content in picture
- Clear, up-close photos of one of the following to clearly indicate case temperature: thermostat temperature, case content
- Required photos (see Project Document Checklist section on Page 3)
- All photos should clearly labeled with store name and case temperature (LT or MT)

Auto Door Closer (ADC) for Walk-In Storage Units

Measure Description	Measure ID	Rebate	Rebate per
ADC, Low Temp (Freezer)	SWCR005B	\$350.00	Each
ADC, Medium Temp (Cooler)	SWCR005A	\$250.00	Each

Requirements

- The ADC must be installed on the main insulated opaque door(s) of an existing walk-in cooler or freezer.
- The ADC must firmly close the door when it is within one inch of full closure.
- Door must not be and have never been previously equipped with an ADC

Restrictions

- A walk-in cooler or freezer manufactured after January 1, 2009, is not eligible. If the nameplate is not legible or does not display manufacturer date, a signed customer affidavit certifying is required.

- This measure is not eligible for buildings located in CA Energy Climate Zone 16. Contact Willdan prior to installation to verify your site's Climate Zone.

Additional Data Required for Rebate

- Clear, up-close photos of one of the following to clearly indicate case temperature: thermostat temperature, case content
- Required photos (see Project Document Checklist section on Page 3)

Glass Door Retrofits for Medium-Temp Open Vertical Refrigerated-Cases

Measure Description	Measure ID	Rebate	Rebate per
Add Glass Doors without Lighting to Open Vertical Refrigerated Cooler Cases Already Equipped with LEDs	SWCR015A	\$30.00	Linear Feet
Add Glass Doors with LED Lighting to Open Vertical Refrigerated Cooler Cases with non-LED Lighting	SWCR015B	\$40.00	Linear Feet

Requirements

- The glass doors must be added to an existing open-vertical, medium-temperature display case. If the case was equipped with non-LED lighting, that lighting must be removed and the new doors must be equipped with LED lighting.
- This measure may require some or all of the following changes to the refrigeration system serving the associated display case in order to maintain proper function. A refrigeration contractor with design experience should be consulted before proceeding with the retrofit.
 - Replacing the expansion valve and/or evaporator pressure regulating valve
 - Adjusting the evaporator temperature/pressure set point
 - Resizing refrigeration piping, replacing the flood back valve on the condenser
 - Resizing the coil/piping on applicable heat reclaim systems
 - Replacing or removing compressors

Restrictions

The following are not eligible:

- The complete removal of the existing display case and replacing it with a new case with glass doors
- Systems where the total lighting power density of the new system exceeds 18.3 watts per horizontal linear foot of casing or exceeds the existing system’s lighting power density
- New doors or door-mounting systems that contain anti-sweat heaters
- Total power of new lighting must not exceed total power of existing lighting

Additional Data Required for Rebate

- Photos and product sheets detailing the total lighting power of the existing system
- Photos and product sheets detailing the total lighting power of the new systems
- Required photos (see Project Document Checklist section on Page 3)

Enhanced Ventilation Measures for Packaged HVAC*

*Pre-installation eligibility verification required by Willdan.

Measure Description		Measure ID	Rebate	Rebate per
AC-only unit	add VFD, ADEC existing	SWHC023D	\$35.00	Rated Tons
	add VFD and ADEC	SWHC023M	\$31.00	
	add VFD and NEMA Premium Motor, ADEC existing	SWHC023E	\$37.00	
	add VFD and PMM Motor, ADEC existing	SWHC023F	\$40.00	
	add VFD, NEMA Premium, and ADEC	SWHC023N	\$33.00	
	add VFD, PMM, and ADEC	SWHC023O	\$34.00	
AC unit with gas heat	add VFD, ADEC existing	SWHC023A	\$30.00	
	add VFD and ADEC	SWHC023J	\$31.00	
	add VFD and NEMA Premium, ADEC existing	SWHC023B	\$33.00	
	add VFD and PMM, ADEC existing	SWHC023C	\$34.00	
	add VFD, NEMA Prem., and ADEC	SWHC023K	\$33.00	
	add VFD, PMM, and ADEC	SWHC023L	\$34.00	
	add enhanced ventilation, CO2 sensor, VFD, and ADEC	SWHC023S	\$33.00	
	add enhanced ventilation, CO2 sensor, VFD, NEMA Prem., ADEC	SWHC023T	\$35.00	
add enhanced ventilation, CO2 sensor, VFD, PMM, and ADEC	SWHC023U	\$36.00		
Heat pump	add VFD, ADEC existing	SWHC023G	\$38.00	
	add VFD and ADEC	SWHC023P	\$38.00	
	add VFD and NEMA Premium, ADEC existing	SWHC023H	\$40.00	
	add VFD and PMM, ADEC existing	SWHC023I	\$41.00	
	add VFD, NEMA Premium, and ADEC	SWHC023Q	\$40.00	
	add VFD, PMM, and ADEC	SWHC023R	\$41.00	
	add enhanced ventilation, CO2 sensor, VFD, and ADEC	SWHC023V	\$46.00	
	add enhanced ventilation, CO2 sensor, VFD, NEMA Prem., and ADEC	SWHC023W	\$48.00	
	add enhanced ventilation, CO2 sensor, VFD, PMM, and ADEC	SWHC023X	\$50.00	

Definitions

- AC: Air conditioning
- VFD: Variable frequency drive
- ADEC: Advanced digital economizer control
- PMM: Permanent magnet motor
- NEMA: National Electrical Manufacturers Association
- CO2: Carbon Dioxide

Requirements

- This measure requires field documentation of the existing conditions that verify the measure was necessary and that the measure was successfully applied. Detailed documentation must be submitted to Willdan before **and** after installation to verify compliance. See data requirements.

- The existing system must:
 - be packaged or split single-zone DX cooling unit with gas heat, cooling only unit, or heat pump
 - have a constant-volume supply fan
 - have an operable airside economizer installed and the economizer high limit must be optimized for the climate per Title 24 2016 Table 140.4-E, as listed in the table below.

Device Type	Climate Zone	Economizer High Limit Equation
Fixed Dry Bulb	5, 13-16	Outside Air Temp > 75 deg F
	10	Outside Air Temp > 73 deg F
	6, 8, 9	Outside Air Temp > 71 deg F
Differential Dry Bulb	5, 13-16	Outside Air Temp > Return Temp
	10	Outside Air Temp > (Return Temp - 2 deg F)
	6, 8, 9	Outside Air Temp > (Return Temp - 4 deg F)
Fixed Enthalpy + Fixed Dry Bulb	All	Either "Outside Air Enthalpy > 28 Btu/lb" or "Outside Air Temp > 75 deg F"

Climate Zone can be identified here:

<https://caenergy.maps.arcgis.com/apps/webappviewer/index.html?id=5cfefd9798214bea91cc4fddaa7e643f>

- Any required system maintenance and repairs to the economizer should be completed prior to or in conjunction with this measure.
- Implementation requires proper setup of the damper limits and fan speeds to provide ventilation in accordance with Title 24 2016. Total unit airflow must be verified for at least one of the fan speeds. The percentage of outdoor air must be verified for each of the unit operating modes, including heating and cooling for each stage and ventilation only mode.
- If the existing unit is not already equipped with advanced digital economizer controls (ADEC), ADEC must be added to the equipment to be eligible for rebates.

Restrictions

- This measure is not applicable if the HVAC unit has a fully operational and/or non-snapdisc sensor and is adjusted to the appropriate changeover setpoint based on the number of thermostat stages available for cooling.
- This measure is not applicable if the unoccupied supply fan operation is already set to "Auto" or intermittent.
- The measures related to adding Enhanced Ventilation (demand-controlled ventilation) and CO₂ sensors are not eligible in the following building types:
 - Private Education - Community Colleges, Primary Schools, Secondary Schools
 - Healthcare – Hospitals, Nursing Homes
 - Lodging – Hotels
 - Office – Large Offices
 - Storage

Additional Data Required for Rebate

- Detailed documentation of all tested and observed conditions before **and** after implementing the project, including:
 - Economizer functionality
 - Economizer high limit setting
 - # of fan speeds
 - Total unit air flow at each fan speed

- % of outdoor air provided in each operating mode (ventilation-only and each stage of cooling and heating)
- Confirmation that existing equipment was not already equipped with these measures
- Detailed documentation of all maintenance actions performed in conjunction with the measure
- Proof that ADEC is existing or was installed as part of the project
- Required photos (see Project Document Checklist section on Page 3)

Adjust Supply Fan Controls Settings – Unoccupied Periods

Measure Description		Measure ID	Rebate	Rebate per
Unoccupied fan control	AC only unit	SWHC009A	\$10.00	Rated Tons
	AC unit with gas heat	SWHC009B	\$10.00	
	Heat pump	SWHC009C	\$15.00	
	Variable volume AC unit with gas heat	SWHC009D	\$15.00	

Requirements

- Detailed documentation must be submitted to Willdan before **and** after installation to verify compliance. See data requirements.
- This measure involves setting supply fan controls to operate in “Auto” or intermittent modes during unoccupied period.
- Applies to unitary or split direct expansion (DX) systems that do not serve process loads.
- Existing system’s supply fan must operate continuously during unoccupied periods.
- This measure requires field documentation of the existing conditions that verify the measure was necessary and that the measure was successfully applied.
- Contractors and technicians implementing this measure should also verify the following:
 - Where applicable, the system's first cooling stage is dedicated to economizer cooling and multi-stage thermostat operation is enabled
 - Changeover setpoint should be adjusted appropriately based on number of available cooling stages

Restrictions

- This measure is not applicable if the HVAC unit has a fully operational and/or non-snapdisc sensor and is adjusted to the appropriate changeover setpoint based on the number of thermostat stages available for cooling.
- This measure is not applicable if the unoccupied supply fan operation is already set to “Auto”, intermittent, or off.
- This measure is not applicable for heat pump systems in Refrigerated Warehouses.
- This measure is not applicable for VAV AC with Gas heat systems in the following building types:
 - Private Education - Portable building and relocatable classrooms
 - Assembly / Gathering spaces
 - Grocery Stores
 - Light Industrial Manufacturing spaces
 - Restaurants
 - Retail
 - Conditioned Storage
 - Refrigerated Warehouses

Additional Data Required for Rebate

- Detailed documentation of all tested and observed conditions before **and** after implementing the project, including:
 - Technician verification of thermostat wiring and the number of cooling stages, ensuring that the first stage of cooling is dedicated to economizer operation and that two-stage operation is enabled where possible
 - Controller changeover setpoint is adjusted appropriately based on the available number of thermostat cooling stages
 - Verification that existing unit does not already have supply fan in automatic mode or in a mode that switches the fan off during unoccupied periods.
- Required photos (see Project Document Checklist section on Page 3)

Variable Speed Drive (VSD) for HVAC Fan Controls

Measure Description	Measure ID	Rebate	Rebate per
VSD on HVAC supply fan control	SWHC018A	\$85.00	Rated HP

Requirements

- This measure can only be applied to a constant speed HVAC supply or return fan used within a damper-controlled variable air volume (VAV) system.
- The HVAC fan must have a rated power of 100 hp or less.
- Any existing fan or airflow throttling devices, such as inlet vanes, bypass dampers, or throttling valves, must be removed or permanently disabled.
- The measure is only eligible for use in the following building types:
 - Private Education - Secondary School, Community College, University
 - Health - Hospital, Nursing Home
 - Lodging - Hotel
 - Office - Large Office
 - Retail - Multistory Large Retail
 - Grocery

Restrictions

- Replacement of multiple-speed or variable speed motors (VSM) are not eligible.
- Applications for exhaust fans and cooling towers are not eligible.

Additional Data Required for Rebate

- Equipment ID
- Existing motor HP
- Existing fan control type
- Existing fan type
- VSD manufacturer and model number
- Required photos (see Project Document Checklist section on Page 3)

Variable Speed Drive (VSD) for Central Plant Condenser Water Pump

Measure Description	Measure ID	Rebate	Rebate per
VSD on condenser water pump – Hotels	SWHC008B	\$60.00	Rated HP
VSD on condenser water pump – Other	SWHC008B	\$35.00	Rated HP

Requirements

- All new variable speed drives (VSDs) and motor equipment must be UL Listed and specifically rated for the application.

Restrictions

- The existing pump must not already be equipped with a VSD.
- This measure is not eligible for central plant equipment that:
 - Supports “process” loads or non-HVAC “space comfort loads
 - Is currently undergoing any type of plant optimization or retro-commissioning project
 - Operates with thermal energy storage

PTAC or PTHP Replacement, Under 24,000 BTU/hour

Measure Description	Measure ID	Rebate	Rebate per
PTAC, High Efficiency DX unit below 24kBtuh	SWHC027A	\$1.75	Rated kBTU/hr
PTHP, High Efficiency DX unit below 24kBtuh	SWHC027E	\$1.75	Rated kBTU/hr

Requirements

- Must be either a packaged terminal air conditioner (PTAC) or a packaged terminal heat pump (PTHP) that is through the wall, self-contained, and has a cooling capacity ≤ 2 tons (≤ 24 kBtuh).
- Measure case exceeds code by 20% and meets the following criteria:

Capacity Range	PTAC Minimum EER	PTHP Minimum EER
$\leq 7,000$ Btu/hr	11.29	11.17
$>7,000$ Btu/hr and $\leq 15,000$ Btu/hr	10.27	10.15
$>15,000$ Btu/hr	9.25	9.13

- The measure is only eligible for use in the following building types:
 - Health - Nursing Home
 - Lodging - Hotel, Motel, Guest Rooms
 - Office - Large Office, Small Office
 - Retail - Small Retail
 - Restaurant - Fast Food
 - Refrigerated Warehouse

Restrictions

- Ductless mini-split units are not eligible.

Software Controlled Switched Reluctance (SRM) Motor

Measure Description	Measure ID	Rebate	Rebate per
Software-controlled SRM for supply fan	SWHC041A	\$5.00	Rated HP

Requirements

- The software-controlled SRM must replace a supply fan induction motor and VFD controller in a HVAC packaged unit used in a commercial building.
- Applicable to fan motors with a nameplate rating between 1 HP to 3 HP.
- The new motor and controls must be UL Listed.
- Installation must meet all applicable regulations, including but not limited to the current California Building Energy Efficiency Standards (Title 24), federal code, and the National Electrical Code® (NEC). A non-exhaustive list of some notable Title 24 Requirements can be found below:
 - Title 24 Section 140.9 (A) 5, Fan Control - Each unitary air conditioner with mechanical cooling capacity exceeding 60,000 Btu/hr and each chilled water fan system shall be designed to vary the airflow rate as a function of actual load and shall have controls and/or devices (such as two-speed or variable speed control) that will result in fan motor demand of no more than 50 percent of design wattage at 66 percent of design fan speed
 - Title 24 Section 140.4 (C) 1, Fan Power Limitation - For Variable Volume Systems, either
 - Option 1: Fan system motor nameplate hp \leq CFMs \times 0.0015 or
 - Option 2: Fan system bhp \leq CFMs \times 0.0013 + A where A = sum of (Pressure Drop \times CFM_D/4131)

Restrictions

- This measure is not eligible for other fans, such as the return fan or outdoor air fan of a packaged HVAC unit.
- This measure is not eligible for supply fan motors rated less than 1 hp and or greater than 3 hp.

Water-Cooled Chiller Replacement (Centrifugal or Screw)

Building Type	Rebate per Ton	Rebate per
Hotels, Nursing Homes	\$3.00	Rated Tons
Retail, Office, Hospitals, Private Education	\$2.00	Rated Tons

Measure Description	Measure ID	Size	Max Power Rating
Water cooled centrifugal chiller w/1 conventional VSD compressor and condenser relief	SWHC005J	< 150 tons	0.626 kW/ton, 0.396 IPLV
	SWHC005B	150 to 299 tons	0.572 kW/ton, 0.36 IPLV
	SWHC005D	300 to 399 tons	0.536 kW/ton, 0.351 IPLV
	SWHC005F	400 to 599 tons	0.527 kW/ton, 0.342 IPLV
	SWHC005H	>= 600 tons	0.527 kW/ton, 0.342 IPLV
Water cooled variable speed screw chiller	SWHC005T	< 75 tons	0.702 kW/ton, 0.45 IPLV
	SWHC005L	150 to 299 tons	0.612 kW/ton, 0.396 IPLV
	SWHC005N	300 to 599 tons	0.563 kW/ton, 0.369 IPLV
	SWHC005P	75 to 149 tons	0.675 kW/ton, 0.441 IPLV
	SWHC005R	>= 600 tons	0.527 kW/ton, 0.342 IPLV

Requirements

- Replace existing water-cooled centrifugal or screw chiller with new, variable speed high-efficiency model of the same type of chiller.
- Must meet both full load and integrated part load efficiency requirements specified above under standard AHRI test conditions (normally AHRI 550/590 – 2020).

Restrictions

- Constant speed screw, constant speed centrifugal, and frictionless chillers are not eligible for rebates.
- In a central or multi-chiller cooling plant with lead-lag configuration, lead chiller replacement is not eligible for rebates through the Rapid Rebates offering. Contact Willdan to discuss possible custom-rebate replacement opportunities.
- This measure is only eligible in the following building types:
 - Private Education – Community College, Secondary School, University
 - Healthcare – Hospital, Nursing Home
 - Lodging – Hotel
 - Commercial Manufacturing – Biotech
 - Offices – Large, Small
 - Retail – Multi-story Large

Additional Data Required for Rebate

- Equipment ID, manufacturer, model number, serial number, and installed location
- Type of chiller (centrifugal or scroll) for both existing chiller and new chiller
- Chiller rated capacity
- Chiller full load efficiency and part load efficiency
- Chiller refrigerant type(s)
- Chiller flow control strategy (e.g., variable speed drive)
- Lead/lag configuration
- Invoice with itemized costs
- Building vintage
- Required photos (see Project Document Checklist section on Page 3)

Kitchen Hood Demand-Controlled Ventilation

Measure Description	Measure ID	Rebate	Rebate per
Demand-controlled Ventilation for Commercial Kitchen Exhaust Hood	SWFS012B	\$265.00	Rated HP

Requirements

- This measure must replace a manual ON/OFF switch and magnetic relay or motor starter ventilation control with a control system that varies the exhaust rate based on the energy and effluent output from the exhausted cooking appliances.
- The existing system must be a standard commercial kitchen ventilation system with single-speed exhaust and makeup air fans and a simple ON/OFF control.
- Must install temperature sensor(s) in the hood exhaust collar or within the hood, and/or an optic sensor on the end of the hood or within the hood that senses cooking conditions and allows the system to automatically vary the rate of exhaust and make-up (ventilation) air by adjusting unit fan speeds accordingly.
- Control system must be used in conjunction with a variable-speed drive (VSD) on the fan motor.
- Measure should comply with all local and federal codes, where applicable.

Restrictions

- This system is only eligible for use within existing exhaust hoods in commercial kitchens. Newly constructed hoods are not eligible.
- Systems with total kitchen hood airflow > 5,000 cfm installed after July 1, 2014, are not eligible.
- Used or rebuilt demand control equipment is not eligible.

Additional Data Required for Rebate

- Verification of the total exhaust CFM controlled by the existing kitchen hood Equipment ID, manufacturer, model number, serial number, and installed location
- Required photos (see Project Document Checklist section on Page 3)