WILLDAN

RAPID REBATES GUIDE

For Commercial Buildings

2023 Version 1.31
Applicable beginning Apr 19, 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.

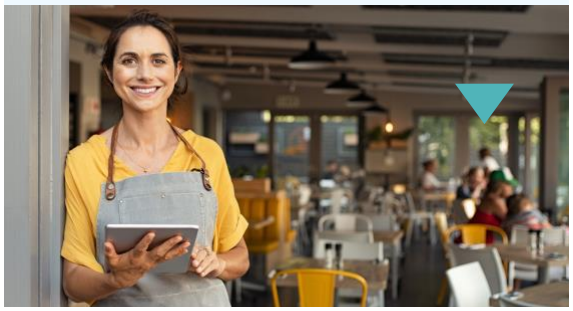
Qualifying criteria and rebate amounts are subject to change and will be posted to our website. You may also place a reservation for your Rapid Rebate, which will be valid for 180 days.

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.

To Be Eligible:

- ✓ Existing commercial customer served by Southern California Edison (SCE)
- ✓ Projects must be in existing areas of existing buildings and cannot be part of additions, major remodels, or capacity expansions.



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

Please visit our website for program terms and conditions.

Process Overview

1

CONFIRM ELIGIBILITY

Confirm that your building and selected equipment meets the criteria in this catalog prior to installation. Contact Willdan with any questions.

2

INSTALL

Install your equipment yourself or with a Contractor.

Willdan is available to install some equipment.

3

VERIFICATION

Submit all documents from the post-installation checklist on page 3. Willdan will verify the installation meets the program criteria with SCE.

4

REBATE PAYMENT

Once SCE approves the post-installation documents, Willdan will issue your rebate check within 30 days.

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
   - Required Photos for all projects
     - 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
   - Photo Submission Requirements
     - Photos must be clearly labeled to identify the specific equipment captured in the photo and which requirement the photo is intended to fulfill
     - Photo properties must include gps coordinates (geo-tagged) to demonstrate photo taken at project site
   - Please contact Willdan with any questions or to ensure that proper photos and documentation is being collected **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				
Replace 4-foot T8 Lamp with High Efficiency Type A TLED		Lamp	$2.00 - $3.00	5
Replace 4-foot T8 Lamp and Ballast with High Efficiency Type B TLED		Lamp	$2.00 - $4.00	7
High Bay and Low Bay LED Light Fixtures		Fixture	$2.00 - $9.00	9
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
Add Glass Doors and LED Lighting to Open Vertical Refrigerated-Cases	Replacing Existing LED Lighting	Linear Feet	$30.00	11
	Replacing Existing Fluorescent Lighting	Linear Feet	$40.00	11
HVAC – DX Systems				
Enhanced Ventilation: Add VFD & ADEC to Single-Zone DX HVAC		Rated Tons	$30.00 - $50.00	12
Add VSD to Supply Fan in Existing Damper-Controlled VAV Unit		Rated HP	$85.00	14
Software-controlled Switched Reluctance Motor for Packaged HVAC Supply Fan		Rated HP	$5.00	15
Adjust Existing Supply Fan Controls for Unoccupied Periods		Rated Tons	$10.00 - $15.00	16
Evaporative Pre-cooler System and Controls for Packaged HVAC Unit		Rated Tons	$3.50 - $60.00	17
Packaged Terminal AC or Heat Pump (PTAC/PTHP) ≤ 24 kBtu/hr		kBTU/hr	$1.75	18
HVAC – Central Plant Systems				
Variable-Speed Centrifugal or Screw Chiller		Rated Tons	$2.00 - $3.00	19
Add VFD to Condenser Water Pump		Rated HP	$35.00 - $60.00	20
Food Service				
Kitchen Hood Demand-Controlled Ventilation		Rated HP	$265.00	21
Water Heating				
Heat Pump Water Heaters (HPWH)		Each	$2,000 - $18,300	22

Type A TLED Replacing Fluorescent T8

Measure Description	Measure ID	Rebate	Rebate per
Efficient 4-foot UL Type A TLED T8 lamp, Indoor, Building Group A	SWLG009A	$5.00	Lamp
Efficient 4-foot UL Type A TLED T8 lamp, Indoor, Building Group B	SWLG009A	$4.00	Lamp
Efficient 4-foot UL Type A TLED T8 lamp, Indoor, Building Group C	SWLG009A	$2.00	Lamp
Efficient 4-foot UL Type A TLED T8 lamp, Parking Garage	SWLG009B	$5.00	Lamp

Type A TLED - Building Group A	Type A TLED - Building Group B	Type A TLED - Building Group C
Grocery Hospital Nursing Home Restaurants Retail Refrigerated Warehouses Large Office (≥100,000 sqft) Private College / University	Small Office (<100,000 sqft)	Storage / Non-Refrigerated Warehouses

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
- Standard 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	$5.00	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	$5.00	Lamp

Type B TLED - Building Group A	Type B TLED - Building Group B
Grocery Hospital Nursing Home Restaurants Retail Refrigerated Warehouses Office Private College / University	Storage / Non-Refrigerated Warehouses

Requirements

- Existing fluorescent T8 lamp(s) and associated electronic ballast(s) 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
- Standard 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
Group A Rebates	$3.00	$4.00	$5.00	$5.00	$7.00	$9.00
Group B Rebates	$2.00	$3.00	$4.00	$4.00	$5.00	$7.00

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

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.

Additional Data Required for Rebate

- Standard required photos (see Project Document Checklist section on Page 3)

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 of 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.
- This measure is not eligible for buildings located in CA Energy Climate Zone 15. Verify your site's Climate Zone prior to installation by contacting Willdan or using this website: Climate Zones

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
- Standard required photos (see Project Document Checklist section on Page 3)
- All photos should be 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. Verify your site's Climate Zone prior to installation by contacting Willdan or using this website: Climate Zones

Additional Data Required for Rebate

- Clear, up-close photos of one of the following to clearly indicate case temperature: thermostat temperature, case content
- Standard 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 to Open Vertical Refrigerated Cooler Cases Already Equipped with LEDs	SWCR015A	$30.00	Linear Feet
Add Glass Doors and LED Lighting to Open Vertical Refrigerated Cooler Cases with Existing Fluorescent 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 situations are not eligible:

- The complete removal of the existing display case and replacement with a new case with glass doors
- The total power of new LED lighting exceeding the power of the existing lighting
- New doors or door-mounting systems that contain anti-sweat heaters

Additional Data Required for Rebate

- Photos and product sheets detailing the total lighting power of the existing display case lighting systems
- Photos and product sheets detailing the total lighting power of the new display case lighting systems
- Completed case lighting calculator file for each store location (contact Willdan for document)
- Summary of refrigeration system modifications that accompanied project, if any
- Standard required photos (see Project Document Checklist section on Page 3)

Enhanced Ventilation: Add VFD & ADEC to Single-Zone DX 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: Climate Zones

- 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

- 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.
- 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 CO_2 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
- Proof of permit must be provided if required by the Authority Having Jurisdiction (AHJ). If not required, may need to provide letter from AHJ stating permit not required.
- Standard required photos (see Project Document Checklist section on Page 3)

Variable Speed Drive (VSD) for Damper-Controlled VAV Unit

Measure Description	Measure ID	Rebate	Rebate per
Add VSD to Supply Fan in Existing Damper-Controlled VAV Unit	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
- Proof of permit must be provided if a permit is required by the Authority Having Jurisdiction (AHJ). If not required, may need to provide letter from AHJ stating permit not required.
- Standard required photos (see Project Document Checklist section on Page 3)

Software-Controlled Switched Reluctance Motor (SRM) for Packaged HVAC Supply Fan

Measure Description	Measure ID	Rebate	Rebate per
Software-controlled SRM for Packaged HVAC 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 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 <= CFM_S x 0.0015 or
    - Option 2: Fan system bhp <= CFM_S x 0.0013 + A where A = sum of (Pressure Drop x 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.

Additional Data Required for Rebate

- Proof of permit must be provided if a permit is required by the Authority Having Jurisdiction (AHJ). If not required, may need to provide letter from AHJ stating permit not required.
- Standard required photos (see Project Document Checklist section on Page 3)

Adjust Existing Supply Fan Controls Settings – Unoccupied Periods

Measure Description		Measure ID	Rebate	Rebate per
Unoccupied fan control adjustment	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 eligible for use in Hotels.
- 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 – Elementary schools and relocatable classrooms
  - Assembly / Gathering spaces
  - Grocery Stores
  - Restaurants
  - Retail
  - Storage or Refrigerated Warehouses

Additional Data Required for Rebate

- Documentation of all tested and observed conditions before **and** after controls adjustment, 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
  - Verification that 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.
- Proof of permit must be provided if a permit is required by the Authority Having Jurisdiction (AHJ). If not required, may need to provide letter from AHJ stating permit not required.
- Standard required photos (see Project Document Checklist section on Page 3)

Evaporative Pre-cooler System for Packaged HVAC

Measure Description	Climate Zone	Building Type	Rebate	Rebate per
Evaporative Pre-cooler System for Packaged HVAC	10	Assembly, Motel, Retail, Restaurant	$3.50	Rated Tons
	13, 14	Office, Conditioned Storage	$3.50	
	14	Hotel	$7.00	
	15	Grocery, Hospital, Office, Conditioned Storage	$7.00	
		Assembly, Hotel, Motel, Nursing Home, Restaurant, Retail	$12.50	
		Refrigerated Warehouse	$60.00	

Requirements

- This measure provides rebates for the installation of an evaporative pre-cooler on the condenser air intake of an existing HVAC packaged unit not previously equipped with a pre-cooler.
- The existing packaged unit on which the evaporative pre-cooler system will be installed must be less than 10 years old.
- A water treatment system must be used in conjunction with the evaporative pre-cooler system to maintain water quality and performance.
- Real time monitoring of the evaporative pre-cooler system must be implemented to ensure the system is working properly.
- The contractor must perform condenser coil cleaning prior to installation of the pre-cooler system.

Restrictions

- Rebates are only available for applications in certain combinations of building types and climate zones, as described in the table above. Verify your site's Climate Zone prior to installation by contacting Willdan or using this website: Climate Zones

Additional Data Required for Rebate

- Standard required photos (see Project Document Checklist section on Page 3)
- Photos of packaged unit nameplates must show manufacturer date and/or serial number. If unavailable, invoices, design drawings, or other dated documentation must be provided to confirm the installation date of the packaged unit.
- A photo of the water treatment system that serves the site's pre-cooler(s).
- Screenshots of the monitoring system's performance dashboard showing the unit(s) enabled and identifying the performance points being monitored. If unavailable, the project invoice should indicate product info confirming the monitoring system was installed.
- Invoice or maintenance service report indicating that the coils were cleaned prior to installation of the pre-cooler(s). If unavailable, provide photo evidence that coils were cleaned prior to installation or an affidavit that the coils were cleaned prior to installation.
- Proof of permit must be provided if a permit is required by the Authority Having Jurisdiction (AHJ). If not required, may need to provide letter from AHJ stating permit not required.

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 kBtu/hr).
- Per SB1414, proof of permit closure is required.
- Measure case exceeds code by 20% and meets the following criteria:

Capacity Range	PTAC Minimum EER	PTHP Minimum EER
≤ 7,000 Btu/hr	11.29	11.17
>7,00 Btu/hr and ≤ 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.

Additional Data Required for Rebate

- Proof of permit closure
- Standard required photos (see Project Document Checklist section on Page 3)

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).
- Per SB1414, proof of permit closure is required.

Restrictions

- Constant speed screw, constant speed centrifugal, and frictionless-bearing chillers are not eligible.
- 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
- Proof of permit closure
- 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

Additional Data Required for Rebate

- Proof of permit must be provided if a permit is required by the Authority Having Jurisdiction (AHJ). If not required, may need to provide letter from AHJ stating permit not required.
- Standard 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. Both hood and exhaust fan must have been installed prior to this date.
- 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
- Photo of existing manual on/off control switch
- Standard required photos (see Project Document Checklist section on Page 3)

Heat Pump Water Heater (HPWH)

New HPWH Size	New HPWH Min Efficiency	Existing Water Heater Fuel Type	Existing Water Heater Type / Size	Rebates ($/HPWH)		
				Building Group A	Building Group B	Building Group C
45 - 55 gal	3.30 UEF	Electric Resistance	Storage, 30 - 50 gal	$4,500	$3,000	$2,000
45 - 55 gal	3.30 UEF	Gas-Fired	Storage, 30 - 50 gal	$6,900	$6,900	$5,500
45 - 55 gal	3.30 UEF	Gas-Fired	Tankless, 4+ gal/min	$6,900	$5,800	$4,500
56 - 75 gal	3.30 UEF	Gas-Fired	Storage, 60 gal	$7,700	$7,700	$6,000
76 - 100 gal	3.30 UEF	Gas-Fired	Storage, 75 gal	$8,500	$8,500	$8,500
120 gal	4.3 COP	Gas-Fired	Storage, 100 gal	$18,300	$16,050	$16,050
120 gal	4.3 COP	Gas-Fired	Tankless, 76+ kBtu/hr	$18,300	$16,050	$16,050

HPWH - Building Group A	HPWH - Building Group B	HPWH - Building Group C
Grocery Hospital Hotel Nursing Home Refrigerated Warehouses	Assembly (Gathering Spaces) Motel Large Retail (≥40,000 sqft)	Office Restaurants 3-story Retail Small Retail (<40,000 sqft) Storage / Non-Refrigerated Warehouse

Requirements

- This measure involves the replacement of an existing electric resistance or gas-fired water heater with a packaged HPWH. There are specific eligible combinations of packaged HPWH and existing water heater, as specified in the table above. For split/built-up water heating systems or any water heater replacement projects not represented in the table above, please contact Willdan for eligibility information.
- The HPWH must meet the storage minimum efficiency requirements described in the table above and must be listed on Willdan's qualified product list. Contact Willdan for details.
- Proof of project permit is required for approval.

Restrictions

- Replacement of an "instantaneous" or "tankless" **electric** water heater does not qualify.
- Existing gas pipeline servicing base equipment must be disconnected and capped, and equipment must be disposed of.
- Water heaters used for space conditioning, industrial (process) loads, and pools and/or spas applications are not eligible.
- Systems with total heating output capacities greater than 1,000 kBtu/hr are NOT eligible.

Additional Data Required for Rebate

- HPWH projects have specific data collection requirements for both the existing and post-installation equipment and require multi-step collaboration with Willdan to be processed and approved. This multi-step process includes:
  - Project pre-qualification and Customer Eligibility Form
  - Engineering screening and equipment eligibility verification
  - Documentation and photo collection for pre-installation and post-installation equipment and supporting infrastructure
  - Permit closure

Please contact Willdan prior to new equipment purchase and existing equipment removal for a full list of eligibility and data collection requirements.