



Commercial HVAC Rebate Matrix

Use to calculate rebates for HVAC systems for business customers. Each unit must be 5 tons or greater.

Rebates for the installation of new systems

Must be for an existing structure.

Determine efficiency from the table below.

Not for new construction.

\$65 /Ton for Step 1 efficiency
 \$150 /Ton for Step 2 efficiency

Sizing and Efficiency Matrix for CPS Commercial Rebate Program

Steps based on minimum efficiencies listed in ASHRAE 90.1-2007 Table 6.8.1A, Table 6.8.1B, Table 6.8.1C and Table 6.8.1D

Unitary Air Conditioners and Condensing Units, Electrically Operated

EQUIPMENT TYPE	SIZE CATEGORY	SUBCATEGORY OR RATING CONDITION		Step 1	Step 2
Air Conditioners, Air Cooled - Single Phase	< 65,000 Btu/h	Split System	SEER	15.0	16.0
		Single Package	SEER	15.0	16.0
Air Conditioners, Air Cooled - Three Phase	< 65,000 Btu/h	Split System	SEER	15.0	16.0
		Single Package	SEER	13.8	14.8
5.4 TO 11.25	≥ 65,000 Btu/h and < 135,000 Btu/h	Electric Resistance	EER	11.5	12.0
		All other	EER	11.5	12.0
11.26 TO 20	≥ 135,000 Btu/h and < 240,000 Btu/h	Electric Resistance	EER	11.5	12.0
		All other	EER	11.5	12.0
20.1 TO 63.33	≥ 240,000 Btu/h and < 760,000 Btu/h	Electric Resistance (or None)	EER	11.0	12.0
			IPLV	11.5	12.5
		All other	EER	11.0	12.0
			IPLV	11.5	12.5
63.34 AND GREATER	≥ 760,000 Btu/h	Electric Resistance (or None)	EER	11.0	12.0
			IPLV	11.4	12.4
		All other	EER	11.0	12.0
			IPLV	11.4	12.4
Air Conditioners, Water and Evaporatively	< 65,000 Btu/h	Split System and Single Package	EER	13.7	14.4
5.4 TO 11.25	≥ 65,000 Btu/h and < 135,000 Btu/h	Electric Resistance	EER	13.5	14.5
		All other	EER	13.5	14.5
11.26 TO 20	≥ 135,000 Btu/h and < 240,000 Btu/h	Electric Resistance	EER	14.0	15.0
		All other	EER	14.0	15.0
20.1 And GREATER	≥ 240,000 Btu/h	Electric Resistance (or None)	EER	13.0	14.0
			IPLV	12.3	13.3
		All other	EER	13.0	14.0
			IPLV	12.3	13.3

Unitary and Applied Heat Pumps, Electrically Operated (page 2)

EQUIPMENT TYPE	SIZE CATEGORY	SUBCATEGORY OR RATING CONDITION		Step 1	Step 2
Air cooled (Cooling mode)	< 65,000 Btu/h	Split System	SEER	13.0	14.0
		Single Package	SEER	13.0	14.0
5.4 TO 11.25	≥ 65,000 Btu/h and < 135,000 Btu/h	Electric Resistance	EER	11.2	11.7
		All other	EER	11.2	11.7
11.26 TO 20	≥ 135,000 Btu/h and < 240,000 Btu/h	Electric Resistance	EER	10.7	11.5
		All other	EER	10.7	11.5
20.1 TO 63.33	≥ 240,000 Btu/h	Electric Resistance (or None)	EER	10.7	11.2
			IPLV	10.9	11.4
		All other	EER	10.7	11.2
			IPLV	10.9	11.4
Water source (Cooling mode)	< 17,000 Btu/h	86° F entering water	EER	12.6	13.3
	≥ 17,000 Btu/h and < 135,000 Btu/h	86° F entering water	EER	13.6	14.4
Groundwater source	< 135,000 Btu/h	59° F entering water	EER	18.2	19.2
Ground source	< 135,000 Btu/h	77° F entering water	EER	15.4	16.4
Air cooled (Heating mode)	< 65,000 Btu/h (Cooling capacity)	Split System	HSPF	8.8	9.8
		Single Package	HSPF	8.6	9.6
	≥ 65,000 Btu/h and < 135,000 Btu/h (Cooling capacity)	47° F db/43° F wb outdoor air	COP	5.2	6.2
	≥ 135,000 Btu/h and < 240,000 Btu/h (Cooling capacity)	47° F db/43° F wb outdoor air	COP	4.1	4.6
Water source (Heating mode)	< 135,000 Btu/h (Cooling capacity)	68° F entering water	COP	5.2	5.7
Groundwater source (Heating mode)	< 135,000 Btu/h (Cooling capacity)	50° F entering water	COP	4.6	5.1
Ground source (Heating mode)	< 135,000 Btu/h (Cooling capacity)	32° F entering water	COP	4.1	4.6

Packaged Terminal Air Conditioners and Packaged Terminal Heat Pumps, Electrically Operated

EQUIPMENT TYPE	SIZE CATEGORY	SUBCATEGORY OR RATING CONDITION		Step 1	Step 2
PTAC (Cooling mode) New construction	All Capacities	95° F db outdoor air	EER	11.5	12.5
PTAC (Cooling mode) Replacements ^a	All Capacities	95° F db outdoor air	EER	11.5	12.5
PTHP (Cooling mode) New construction	All Capacities	95° F db outdoor air	EER	11.5	12.5
PTHP (Cooling mode) Replacements ^a	All Capacities	95° F db outdoor air	EER	11.5	12.5
PTHP (Heating mode) New construction	All Capacities	—	COP	4.9	5.9
PTHP (Heating mode) Replacements ^a	All Capacities	—	COP	4.9	5.9

a. Replacemnet units must be factory labeled as follows: "MANUFACTURED FOR REPLACEMENT APPLICATIONS ONLY: NOT TO BE INSTALLED IN NEW CONSTRUCTION PROJECTS." Replacement efficiencies apply only to units with existing sleeves less than 16 inches (406 mm) hi

Water Chilling Packages ^b		TABLE I			
EQUIPMENT TYPE	SIZE CATEGORY	SUBCATEGORY OR RATING CONDITION	Step 1 Based on COP	Step 2 Based on COP	
Air cooled, with condenser, electrically operated	< 150 tons	Full Load (COP)	3.700	4.200	
		Part Load (IPLV)	3.810	4.394	
	≥ 150 tons	Full Load	3.500	4.000	
		Part Load	3.810	4.394	
Air cooled, without condenser, electrically operated	All capacities	Full Load	4.100	4.600	
		Part Load	4.200	4.700	
Water cooled, electrically operated	< 150 tons	Full Load	7.000	8.000	
		Part Load	7.500	8.500	
	≥ 150 tons and < 300 tons	Full Load	8.500	9.600	
		Part Load	9.600	9.800	
	≥ 300 tons	Full Load	9.300	9.700	
		Part Load	9.700	10.100	

b. The chiller equipment requirements do not apply for chillers used in low temperature applications where the design leaving fluid temperature is less than or equal to 40° F.

Water Chilling Packages (cont.) ^b		2/11/2011			
		MATCH CELLS WITH WATER CHILLING PACKAGE (TABLE I) AND INPUT COP (Full Load) OR IPLV (Part Load) RATING			
EQUIPMENT TYPE	SIZE CATEGORY	Step 1 (based on kW/Ton)	Step 2 (based on kW/ton)	Step 1 (based on EER)	Step 2 (based on EER)
Air cooled, with condenser, electrically operated	< 150 tons	0.9505	0.8374	12.6244	14.3304
		0.9231	0.8004	12.9997	14.9923
	≥ 150 tons	1.0049	0.8793	11.9420	13.6480
		0.9231	0.8004	12.9997	14.9923
Air cooled, without condenser, electrically operated	All capacities	0.8578	0.7646	13.9892	15.6952
		0.8374	0.7483	14.3304	16.0364
Water cooled, electrically operated	< 150 tons	0.5024	0.4396	23.8840	27.2960
		0.4689	0.4138	25.5900	29.0020
	≥ 150 tons and < 300 tons	0.4138	0.3664	29.0020	32.7552
		0.3664	0.3589	32.7552	33.4376
	≥ 300 tons	0.3782	0.3626	31.7316	33.0964
		0.3626	0.3482	33.0964	34.4612