

Heat it up with SMUD's High Efficiency Heat Pump Program!



How Do I Get a High-Efficiency Heat Pump?

When selecting your next heat pump, look for an ENERGY STAR® qualified system. With no compromise to system quality, you know that it meets strict energy-efficiency guidelines set by the

US Environmental Protection Agency (EPA). Making the choice to buy an ENERGY STAR® qualified heat pump will save you money and help to protect our environment.

ENERGY STAR's high-efficiency guidelines apply to equipment with efficiency ratings of 14 SEER, 12.2 EER and 8.2 HSPF or higher for split systems; and 14.0 SEER, 11.0 EER and 8.0 HSPF or higher for package systems. These are the minimum ratings. SMUD provides a rebate for units installed that exceed the minimum efficiency required by law.

What Are SEER, EER and HSPF?

Seasonal Energy Efficiency Ratio (SEER) is the measure of a unit's average energy efficiency over a cooling season. The federal energy-efficiency standard for new equipment is 14 SEER. While 14 SEER equipment may be more efficient than your current system, it is now considered standard efficiency.

Energy Efficiency Ratio (EER) is a measurement of how energy efficient the cooling side of the heat pump remains at high outdoor temperatures and persistent use. Many heat pumps do not operate efficiently at high outdoor temperatures (95°F and above). A high EER rating ensures that your unit is operating efficiently at all temperatures.

Heating Seasonal Performance Factor (HSPF) is a measure of a system's average energy efficiency over a heating season. This rating includes the systems auxiliary or supplemental heater.

Ensure That Your System Components Match

There are two types of systems; package units that contain their components in a single enclosure, and split systems that have an outdoor unit and an indoor coil. If you choose a split system, the outdoor unit and the indoor coil must be matched and replaced together when a new system is installed to ensure that your new cooling equipment performs at its peak efficiency. SMUD does not provide rebates for changing only half of a split system.

California's Energy Code (Title 24)

Requirements for the installation of heat pumps shall comply with the State of California Residential Title 24 energy efficiency requirements including:

- **Refrigerant Charge**—Performance and efficiency of your heat pump is greatest when the refrigerant charge is correct.
- **Duct Sealing**—A duct system that is properly sealed can make your home more comfortable and more energy efficient.
- **Air Flow**—Having the correct amount of air flow across the indoor coil is important for proper operating performance of your heat pump and comfort.
- **Fan Watt**—Keeping the total fan wattage less than 0.58 watts per CFM ensures that the system operates to its maximum potential.

Correct refrigerant charge, proper air flow and tight ducts are vital to the operation of your new heat pump. They will also increase equipment life and help reduce energy use.

Building Permit

Split and packaged heat pump systems require a building permit. The contractor and homeowner are responsible to ensure that the building permit is finalized.

Get The Right-Sized Unit

When it comes to cooling equipment, bigger isn't always better. Studies show that up to 1/2 of homes heat pumps don't work the way they should because they are improperly sized.

Ductless Mini Split Units

Mini splits are a new type of heat pump which cools and heats individual areas. There is an outside unit with inside unit(s) that are connected via refrigeration lines. No ductwork is involved which creates pinpoint comfort. These units are especially suited for two story homes where comfort is difficult to achieve plus rooms where the majority of time is spent.



(More information on back)



High-Efficiency Heat Pump Program *(continued)*

Minimum Efficiency Tiers for Rebates and Financing for Heat Pumps

SMUD is offering rebates to customers who install ENERGY STAR® heat pumps at the highest efficiency levels. The rebate amount is based on the minimum efficiency levels (SEER, EER, and HSPF) shown below.

Split System

	Minimum SEER	Minimum EER	Minimum HSPF	Title 24	Rebate
0	14.0	12.2	8.2	Required for all tiers • Refrigerant Charge • Duct Sealing • Fan Watt • Airflow	Financing only
1	15.0	12.5	8.5		\$400
2	16.0	13	9.0		\$500
3	18.0	13	10.0		\$650

Package System

	Minimum SEER	Minimum EER	Minimum HSPF	Title 24	Rebate
0	14.0	11.0	8.0	Required for all tiers • Refrigerant Charge • Duct Sealing • Fan Watt • Airflow	Financing only
1	15.0	12	8.2		\$400
2	16.0	12	8.2		\$500

Ductless Mini Split

	Minimum SEER	Minimum EER	Minimum HSPF	Title 24	Rebate
1	15.0	—	8.5	• # of zones x \$200 maximum 4 zones per household*	

Program Eligibility Requirements

- Residence must be in SMUD service territory, and have an active residential electric service rate.

SMUD Financing

SMUD offers 100% financing for a maximum term of 15 years. Loan amounts can include a new gas furnace and upgrade components if installed as part of the system. If you use SMUD financing to purchase your high-efficiency heat pump, the rebate will be deducted from the contract price. Interest rates vary.†

Choosing a Contractor

Finding a good contractor requires references. As a starting point, you can go to a number of websites for help:

- Angie's List is a membership service that compiles consumer ratings of local service companies and contractors. Use the promo code EASY to get a discount on membership and use the site to research and choose a contractor.
- The Better Business Bureau lets you research companies to see if they are the subject of complaints filed with the BBB.
- HomeAdvisor.com lets you gather price quotes from service companies that work with HomeAdvisor.
- Yelp.com offers community ratings and comments for a wide range of businesses.
- Get at least three bids, and check references and recent projects.

SMUD does not endorse a specific contractor. Contractor license numbers can be checked online at www.cslb.ca.gov or by calling 1-800-321-CSLB (2752).

The contractor you hire should:

- Have a license to perform the work.
- Have proper insurance coverage and performance bonds.

- Comply with city/county ordinances and building codes, where applicable.
- Provide a complete description and cost of the job in writing.
- Never ask for more than 10% down or \$1,000, whichever is less, as allowed by law.
- Provide references upon request.

Please note that SMUD does not endorse or warrant any workmanship, installation, labor, cost or materials of your chosen contractor. For a complete list of recommendations please visit www.smud.org.

SMUD is not responsible for repairs or service.

Some manufacturers of heating and air conditioning equipment may offer an extended parts and labor warranty for an additional charge. Please give special attention to the contractor and manufacturer warranty prior to signing a contract. If you have questions, ask your salesperson to explain or check with the manufacturer.

Maintenance

It is important to properly operate and maintain your new equipment. Check your filter at least once a month. Make sure it is clean and fits properly so that no air bypasses it. Dirty filters can cause the equipment to malfunction, use more electricity, and stop working prematurely. Ask your contractor for additional instructions for your particular equipment. SMUD also has a fact sheet available for more details on heat pump operation.

For More Information

For more information on high-efficiency heat pumps or other Residential Equipment Efficiency Programs, call SMUD at 916-732-6798.

† For current rates call 916-732-5472.