

Evaporative Cooling Fact Sheet

Did you Know?

A typical Yolo County home is equipped with air conditioning or inefficient cooling equipment. This old-style equipment can waste a lot of energy and money and still not provide comfortable indoor temperatures.

Evaporative or "Natural" cooling provides high-quality cooling while using 75% less energy and money.

Savings

An Evaporative cooler operates on about 25% of the cost of an air conditioner.

How does Evaporative Cooling work?

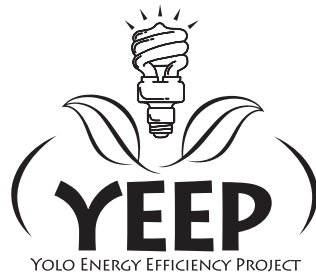
Fresh outside air is pulled through moist pads (where the air is cooled by evaporation) and then circulated through a house or building by a large blower. As this happens, the temperature of the outside air can be lowered 30 degrees. Evaporative coolers work best in hot, dry climates like the Central Valley of California.

How much does Evaporative Cooling cost?

An evaporative cooler consumes only one-fourth of the electrical energy required to operate a refrigerated air conditioning unit. This means you can save up to 75% of your cooling costs on your electric bill!

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EVAP COOLERS
Fact Sheet

Evaporative Cooling

An energy-saving way to beat the heat!

Why an Evaporative Cooler instead of Air Conditioning?

- Evaporative Cooling is all natural! The high volume of fresh, cool air produced by the evaporative cooler helps your body cool naturally.
- Modern high efficiency coolers have rigid, manufactured cooling pads that deliver air 5 degrees cooler than older units.
- Modern coolers are installed with a second pump that operates on a regular interval to remove circulated water so that fresh water is introduced.
- An Evaporative Cooler costs 75% less than a high efficiency air conditioner to purchase; an installed evaporative cooler costs 50-75% less than an air conditioner to operate.

What types of Evaporative Coolers can I buy?

Common units can be upgraded

There are a range of units, from very small room cooling window units to ducted whole house units mounted on the ground, in the attic or on the roof. The most common and lowest cost units have cooling pads made from the wood of aspen trees; these pads are low cost and must be replaced every year or even more often. To improve the performance of a cooler, purchase a replacement rigid media pad. A second pump should also be purchased to prolong the life of your unit and bring fresh water into your home.

Where can I purchase an Evaporative Cooler?

Evaporative Coolers are available at most local retailers in Yolo County. For more information, contact your local hardware or retail store.

Factors to consider when buying an evaporative cooler:

- You will need to provide a water supply to the cooler. Replacement hose bibs are available that have a side tap for the 1/4" water supply line.
- Check with your local building inspector to see if a permit is needed when installing a permanent unit; Make sure to follow local codes and the manufacturer's instructions.
- Look for evaporative coolers with multiple fan speeds that allow you to set the fan at a lower speed when less cooling is needed. This can save you energy and money while increasing your comfort.

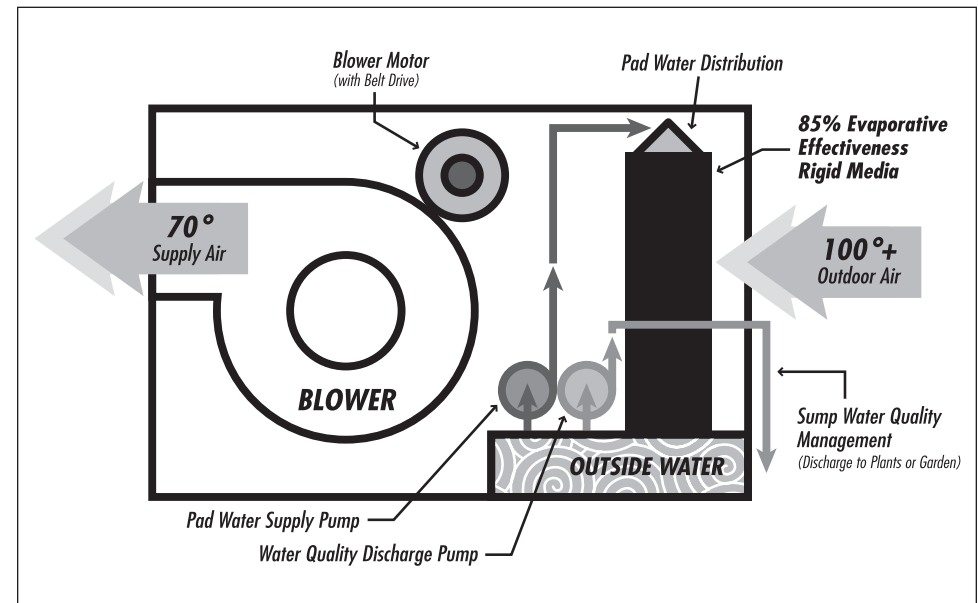


Diagram of Evaporative Cooler (Parts and Processes)

Factors to consider once you own an Evaporative Cooler:

- Winterize your cooler in the fall; make sure you seal and insulate any openings in your home before winter comes.
- It is important to leave at least one window open when an evaporative cooler is running to ensure proper air flow and optimal cooling.
- Never use an Evaporative Cooler at the same time an Air Conditioner is running! This will cause your units to work against each other, wasting you money and energy without additional cooling benefits.
- Maintenance of your Evaporative Cooler is very important! The pads on your unit will need to be maintained or replaced annually. Additionally, the bottom of the interior of your unit will need flushing at the end of the season; there will be pollen, dust and airborne seeds that should be removed.