

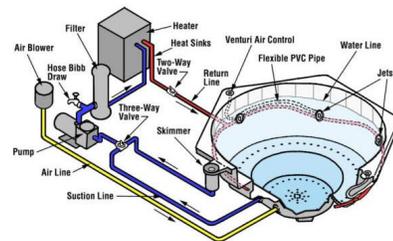
Energy Efficiency for Pools and Hot Tubs

Optimize your energy usage in your aquatic recreations

Before you purchase a pool or hot tub, the simple fact is, your energy use and costs will increase. How much will depend on how efficient your equipment is, how often you use it, how you maintain it and a variety of other factors.

Hot Tubs

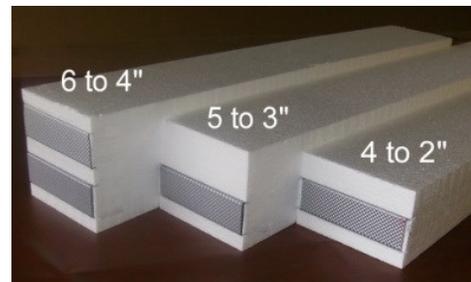
When considering the energy efficiency of a hot tub, some key elements to look for are the cover, tub insulation, and pump system. Each hot tub will come labeled with the rate of energy consumption of which it's used on a typical basis. On this label should be assumptions for outdoor temperature, hot tub set temperature, amount of use and size of motor. Furthermore, older hot tubs are not nearly as energy efficient as newer models! New and improved designs have shown that they use half as much electricity as models that were sold a decade ago!



Hot Tub Covers: What are my options?

Reducing Energy Consumption: Hot Tubs

- Use a tight fitting, insulated cover to contain as much heat as possible
- Add a hot tub blanket between the cover and top of the tub for extra insulation to contain heat
- Optimize the amount of time that the pump runs
- Change filters regularly to avoid overworking the pump
- Avoid using the blower (to make bubbles) when unoccupied
- Set the temperature to no higher than what you need it



R-Value is a measurement of how much heat resistance a material has. The higher the R value, the more the heat is contained in the hot tub, thus saving more energy on heating.

- GOOD: 4" to 2" Taper 2.0lb Density = R15
- BETTER: 5" to 3" Taper 2.0lb Density = R23
- BEST: 6" to 4" Taper 2.0lb Density = R30



Pools

The two biggest costs associated with pools are the pool heater, and the pump to circulate water. If you choose to heat your pool, there are significant energy consumption costs. Similar to hot tubs, the newer the filtration system, the more efficient it will run, and the lower the energy costs.



Reducing Energy Consumption: Pools

- Limit the time the pool pump is on!
- Get the correct size pump for the pool. If the pump is too large, you could use more energy than needed.
- Newer pumps are more energy efficient than older pumps
- Using a cover will reduce the amount of debris in the pool, which means less vacuuming
- Create windbreaks by adding landscaping or fencing to reduce heat loss
- Utilize pump timers to optimize to run the pump for the minimum time necessary

Cover and Heating Options

To have a cover, and also heat a pool efficiently, consider a solar cover. Dependent on the amount of sunshine your pool receives, a solar cover heats the air between the water and the cover which, in turn, heats the water. Similarly, yet much more effective, a solar water heater could be most economical. The pool water circulates through a solar water collector which heats the water before it returns back to the pool.



Resources

www.energy.gov
www.takecontrolandsave.coop
www.energysavers.org

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