

Pool and Spa Covers

There are two main reasons to invest in a cover for your pool: A cover can reduce your overall pool maintenance cost, including heating and chemical use, and it could prevent a serious accident. Not all pool covers do both, but there is enough variety out there to find the cover that best suits your needs. Or it may make sense to get two covers.

Maintenance Covers

It is going to cost you a certain amount of money each season to heat and clean your pool. The right cover can help you reduce those costs.

Pools can consume a lot of energy and, therefore, money. The U.S. Department of Energy (DOE) has determined that evaporation accounts for 70 percent of the heat loss in both outdoor and indoor pools. It takes 1Btu to raise the temperature of 1 pound of water 1 degree higher. But each pound of 80-degree water that evaporates out of a pool takes 1,048 Btu of heat with it. Covering the pool can save you 50 to 70 percent in heating costs. The table “How Good Are Pool Covers,” listed below, shows the cost of heating a pool with an energy-efficient heat pump with and without a pool cover. One drawback is that if you leave covers on during the day, the pool won’t be able to collect as much heat from the sun. A transparent cover cuts solar absorption by 5 to 15 percent; an opaque cover by 20 to 40 percent, according to the DOE.

But energy savings is only part of the story. A cover keeps out debris that either you or your pool’s cleaning system needs to remove. Covers can reduce chemical usage by 35 to 60 percent. They also conserve water by 30 to 50 percent over

pools that do not have covers.

The typical maintenance cover is made of vinyl or insulated vinyl. You'll also find a clear bubble cover---resembling a thick version of bubble wrap--- that is often called a solar cover. The maintenance covers tend to last longer.

The covers themselves aren't that expensive. It's the system that puts the covers on the pool and removes it that increases the cost. The simplest is a line attached to the edges of the cover that allows you to pull it into place. Some cover manufactures sell reels that let you roll up the cover when you want to use the pool. Automatic systems, the most expensive and the most convenient, unroll and roll up the cover with a touch of a button or the turn of a key. Some of these systems cover the entire area around the edges of the pool. Others run on tracks that recessed under the coping. The result is a cover that seems to be part of the pool itself.

It's important to know that some maintenance covers meet the requirements of the American Society for Testing and materials (ASTM) standard F1346-01 (1996) for pool safety covers. But others do not. The typical maintenance cover will not support the weight of a child if he or she should fall onto it.

Safety Covers

Although some maintenance covers are also safety covers, some aren't. A safety cover meets the requirements in ASTM F1346-91 (1996). ASTM standards require that a cover will be able to support the weight of a small child if the child should walk on the cover. There are some covers that let you drain standing water so that accumulation from rain or other sources does not become a hazard. These types of covers are made of a tough mesh material and are anchored to the pool deck with

stainless-steel hardware. This is the type of cover to use to over the pool in the off season.

Spa Covers

Energy Efficiency is an important element of a spa. The goal is to keep the water extremely warm--- 100- plus degrees Fahrenheit--- even though the outside temperature may be much colder. Most portable spas have insulated shells, so a spa without a cover is really a waste of money.

Spa covers should fit the top of the spa securely, allowing for any surface-mounted controls. Covers are usually secured to the side of the spa with clips and have a few inches of foam insulation to protect against heat loss.

Although unwieldy, a spa cover can usually be removed and replaced by an adult. Lifting mechanisms are available that make the job easier.

How Good Are Pool Cover?

The following table shows what it cost to heat a 1,000-sq ft. pool in a variety of geographical locations with and without a pool cover. The table assumes that the pool is heated by a 80-percent efficient natural-gas heater at \$0.50 per therm. The pool is uncovered for 8 hours a day

Location	Season	Pool Temperatures		
		78 Degrees	80 Degrees	82 Degrees
Miami	1/1-12/31	\$1,335	\$1,780	\$2,250
W/cover		260	365	500
Phoenix	3/1-10/31	865	1,110	1,385
W/cover		60	105	160
Dallas	4/1-10/31	945	1,200	1,535
W/cover		115	175	255
Atlanta	4/1-10/31	1,065	1,405	1,800
W/cover		200	265	370
Los Angeles	5/1-10/31	1,165	1,485	1,815
W/cover		105	190	295
Kansas City	5/1-9/30	896	1,170	1,490
W/cover		180	260	340
New York	5/1-9/30	905	1,190	1,490
W/cover		130	185	250
Chicago	5/1-9/30	1,013	1,295	1,585
W/cover		135	185	240
Denver	5/1-8/31	1,292	1,560	1,835
W/cover		110	145	225
Boston	5/31-8/31	1,070	1,310	1,565
W/cover		145	205	288
Minneapolis	6/31-9/30	832	1,110	1,360
W/cover		120	155	240
San Francisco	6/1-8/31	975	1,160	1,355
W/cover		120	200	295
Seattle	6/1-8/31	953	1,115	1,285
W/cover		190	265	345

Source: reduce Swimming Pool Energy Costs program of the Department of Energy Efficiency and Renewable Energy Clearinghouse Creative Homeowner Pools and Spas