

Calculating Initial Heating Time

The time it takes to initially warm your pool or spa depends on several factors.

First, determine how many gallons of water are to be heated. Knowing this, you can then compute the equivalent pounds of water involved, and the BTU's necessary to heat the volume of water to the desired temperature.

Next, find the approximate BTU output of your heat pump at the current ambient air temperature; see product literature at: www.aquacal.com, or contact AquaCal Customer Support (727-823-5642).

Finally, decide upon the temperature at which you plan to maintain your pool or spa.

The following work sheet can be used to calculate approximately how long it will take your heater to bring your pool or spa up to temperature. Keep in mind heating times will vary somewhat due to weather conditions during the period that the heater is in use; use of a pool blanket can dramatically improve heat up and heat maintenance performance.

Pool Volume (Length X Width X Average Depth) = _____ Pool Cubic Feet

X Gallons per cubic ft.(7.5) = _____ Pool Gallonage

X Pounds per Gallon (8.3) = _____ Pounds of Water

How many degrees do you want to raise the temperature of the pool?

of Degrees _____ X Pounds of Water (per above) = _____ BTU's Required

BTU's Required (per above) _____ ÷ BTU Output of Heater = _____ Hrs. of Operation

Optional Cold Weather Adjustment Factor:

Hrs. of Operation (per above) _____ X 1.25 (60° F outside air (O.A.) Temperature Factor) =

_____ Hrs. of Operation at 60° F O.A.

At Start Up: Continuous Circulation Pump Operation Required

When starting a heat pump for the first time, it must be permitted to operate, continuously, until the desired water temperature is attained. This may take several hours, to several days, depending upon the size of the pool or spa and weather conditions.

If a time clock or similar device controls the operating times of the water circulation pump, temporarily override the water pump controller, allowing for 24-hour, continuous water pump operation.

Once the body of water has reached the desired temperature, the water pump controller can be reset.