

Heat Pump Operating Cost Estimation

One BTU heats one pound of water one degree

Prepared especially for: _____

No Blanket
 Liquid Blanket
 Solar Blanket

POOL DATA

- 1 _____ Your pool width
- 2 x _____ Your pool length
- 3 = _____ Square feet
- 4 x _____ Your average depth
- 5 = _____ Cubic feet
- 6 x 7.5 Gallons per cubic foot
- 7 = _____ Total gallons in pool
- 8 x 8.3 Pounds of water per gallon
- 9 = _____ BTUs required to raise water 1 degree/lbs. of water

TEMPERATURE DATA

- 10 x _____ Temperature rise desired
- 11 = _____ BTUs required to accomplish temperature rise (line 10)
- 12 x _____ Heat loss (0.5 no blanket, 0.3 liquid blanket, 0.2 blanket)
- 13 = _____ Daily heat loss in BTUs
- 14 x _____ Wind factor (see information below)

HEAT LOAD DATA

- 15 = _____ Daily BTUs needed to maintain desired temp rise (line 10)

HEAT PUMP

- 16 / _____ BTU output of selected heat pump
- 17 = _____ Daily run time
- 18 x _____ Kilowatt input of selected heat pump
- 19 = _____ Daily kilowatts used to heat pool

OPERATING COST

- 20 x _____ Cost per kilowatt hour
- 21 = _____ Daily operating expense
- 22 x 30 Days per month
- 23 = _____ Estimated monthly expense to heat pool
- 24 x _____ Months pool is to be heated
- 25 = _____ Estimated annual heating expense

Wind Factor-UNBLANKETED ONLY*

<u>MPH</u>	<u>Multiplier</u>
0 - 3.5	1
3.6 - 5	1.25

*For typical residential pools – use multiplier 1

Prepared by: _____ AquaCal Date: _____

For more accurate sizing or further assistance,
 please call AquaCal Customer Care at
 727.823.5642