**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
20. x ___________ Cost per kilowatt hour

### OPERATING COST
21. = ___________ Daily operating expense
22. x ___________ Days per month
23. = ___________ Estimated monthly expense to heat pool
24. x ___________ Months pool is to be heated
25. = ___________ Estimated annual heating expense

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**Wind Factor-UNBLANKETED ONLY**

<table>
<thead>
<tr>
<th>MPH</th>
<th>Multiplier</th>
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</thead>
<tbody>
<tr>
<td>0 - 3.5</td>
<td>1</td>
</tr>
<tr>
<td>3.6 – 5</td>
<td>1.25</td>
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</tbody>
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*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