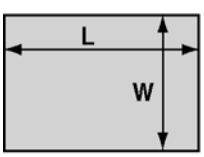
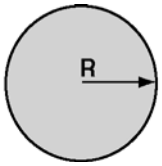
HEATER SELECTION GUIDE

POOL SIZING

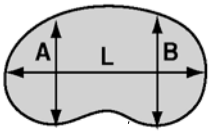
Determine your pool's surface area in square feet.



Area = L x W



Area = R x R x 3.14



Area = (A + B) x L x .45

Determine the temperature difference the heater will maintain. In the table below, locate the surface area equal to or slightly greater than the pool's surface area in the selected temperature difference row. The minimum heater size is indicated at the top of the column.

Tables are based on a 3½ MPH wind velocity and elevation of up to 2,000 feet above sea level.

SPA SIZING

Determine your spa capacity in U.S. gallons (surface area x average depth x 7½).

The reference tables list the time required in minutes to raise the temperature of the spa/hot tub by 30°F. In the table below, locate the spa/hot tub size in U.S. gallons. Select the desired time to raise the spa/hot tub temperature 30°F, read to the left and select the appropriate heater.

This guide can be adjusted for other temperature rises. For example, if you desire a 15°F increase in temperature, simply divide the time for 30°F rise by the 15°F increase (30/15=2).

Note: Heat losses and/or heat absorbed by spa walls or other objects will add to heat-up time.

Spa sizing is based on an insulated and covered spa. Always cover your spa or hot tub when not in use to minimize heat loss and evaporation.

HEATER SIZING CHART

POOL HEATER

Model	125		175		250		325		400	
Temp Diff*	Maximum Area Heater (width x length)									
	0 Wind	3 ½ MPH	0 Wind	3 ½ MPH	0 Wind	3 ½ MPH	0 Wind	3 ½ MPH	0 Wind	3 ½ MPH
15°F	875	675	1250	925	1775	1325	2300	1725	2850	2125
20°F	675	500	925	700	1325	1000	1725	1300	2125	1600
25°F	525	400	750	550	1075	800	1400	1050	1700	1300
30°F	450	325	625	475	900	700	1250	875	1425	1075
35°F	400	300	550	400	775	575	1000	750	1225	900

SPA HEATER

Model	125	175	250	325	400
Spa Size	Time Required to Raise Temp 30°				
200 Gallons	30 Minutes	25 Minutes	20 Minutes	15 Minutes	10 Minutes
400 Gallons	60 Minutes	45 Minutes	30 Minutes	25 Minutes	20 Minutes
600 Gallons	90 Minutes	65 Minutes	45 Minutes	35 Minutes	30 Minutes
800 Gallons	120 Minutes	90 Minutes	60 Minutes	50 Minutes	40 Minutes
1000 Gallons	150 Minutes	110 Minutes	75 Minutes	60 Minutes	50 Minutes

Natural Gas Pipe Size Requirements

Heater Size	Distance from Gas Meter		
	0-50 feet (0-15 m)	50-100 feet (15-30 m)	100-200 feet (30-60 m)
	in.	in.	in.
250	1	1 - 1/4	1 - 1/4
400	1 - 1/4	1 - 1/2	1 - 1/2

Notes:

1. These numbers are for natural gas (.65 Sp. Gr.) and are based on 1/2 inch water column pressure drop. Check supply pressure with a manometer, and local code requirements for variations. **For liquefied petroleum gas, reduce pipe diameter one size, but maintain a 3/4 inch minimum diameter.**
2. Check supply pressure and local code requirements before proceeding with work.
3. Pipe fittings must be considered when determining gas pipe sizing.