

ENGINEERING DATA

HEATER GAS SUPPLY AND PIPE SIZING INFORMATION

“RESIDENTIAL” PROPANE GAS 2 STAGE REGULATION

In many Propane gas line installations, the gas supplier and or installer will utilize a two stage regulation process whereby, at the supply tank, they will install the first stage gas regulator, which would be at a higher pressure, usually 10 psi. This higher pressure allows for much longer distance and in a much smaller pipe size. Then, within a short distance from the pool heater, generally around 24 inches, a second regulator, which is the second stage, would be installed and set at the required inlet pressure of the heater.

SEE “GAS PRESSURE REQUIREMENT CHART.”

Stage One “High Pressure” Gas Pipe Sizing				Stage Two “Low Pressure” Gas Pipe Sizing		
10 PSI @ 2500 BTU Per CU. FT.				Stage 2 set at 14 in. W.C.		
MAXIMUM EQUIVALENT PIPE LENGTH				MAXIMUM EQUIVALENT PIPE LENGTH		
Model	0 to 50 Feet	50 to 100 Feet	100 to 150 Feet	Model	0 to 10 Feet	10 to 20 Feet
75 through 400	1/2 in.	1/2 in.	1/2 in.	75 through 400	3/4 in.	3/4 in.

“RESIDENTIAL” NATURAL GAS 2 STAGE REGULATION

In many Natural gas line installations, the gas supplier and or installer will utilize a two stage regulation process whereby, at the street’s main gas supply, they will install the first stage gas regulator, which would be at a higher pressure. This higher pressure is usually set at 2 psi or 5 psi and can be run for long distances and in a much smaller pipe size. Then, within a short distance from the pool heater, generally around 24 inches, they will install a second regulator, which is the second stage. This second stage regulator would be set at the minimum operating pressure for the heater. For “Natural Gas Pentair Pool Heaters” the minimum is 7 inches W.C.

Stage One “High Pressure” Gas Pipe Sizing				Stage Two “Low Pressure” Gas Pipe Sizing		
2 PSI @ 1000 BTU Per CU. FT.				Stage 2 set at 7 in. W.C.		
MAXIMUM EQUIVALENT PIPE LENGTH				MAXIMUM EQUIVALENT PIPE LENGTH		
Model	0 to 20 Feet	20 to 90 Feet	90 to 200 Feet	Model	0 to 5 Feet	0 to 15 Feet
75 through 400	3/4 in.	1 in.	1-1/4 in.	75 through 300	3/4 in.	1 in.
				350 & 400	1 in.	1 in.

Stage One “High Pressure” Gas Pipe Sizing				Stage Two “Low Pressure” Gas Pipe Sizing		
5 PSI @ 1000 BTU Per CU. FT.				Stage 2 set at 7 in. W.C.		
MAXIMUM EQUIVALENT PIPE LENGTH				MAXIMUM EQUIVALENT PIPE LENGTH		
Model	0 to 50 Feet	50 to 100 Feet	100 to 200 Feet	Model	0 to 5 Feet	0 to 15 Feet
75 through 400	3/4 in.	3/4 in.	3/4 in.	75 through 300	3/4 in.	1 in.
				350 & 400	1 in.	1 in.