Gas Pipe Size and BTU Supply Chart

Natural Gas

Inlet Pressure: Less than 2 psi
Pressure Drop: 0.5 in w.c.
Specific Gravity: 0.60

Natural Gas flow is given in thousands of BTU/hour. One cubic foot of NG gas = 1000 BTU's. Pipe length must include additional length for all fittings. Add approximately 5 feet of pipe per fitting. Natural Gas Example: A burner that requires 374,000 BTU would need a 1" pipe for a 30' long run.

PIPE SIZE (inches)									
Nominal	½"	¾"	1"	1 ¼"	1 ½"	2"	2 ½"	3"	4"
Actual ID	0.622	0.824	1.049	1.380	1.610	2.067	2.469	3.068	4.026
Length (ft)	Capacity in Cubic Feet of Gas per Hour								
10	172	360	678	1,390	2,090	4,020	6,400	11,300	23,100
20	118	247	466	957	1,430	2,760	4,400	7,780	15,900
30	95	199	374	768	1,150	2,220	3,530	6,250	12,700
40	81	170	320	657	985	1,900	3,020	5,350	10,900
50	72	151	284	583	873	1,680	2,680	4,740	9,660
60	65	137	257	528	791	1,520	2,430	4,290	8,760
70	60	126	237	486	728	1,400	2,230	3,950	8,050
80	56	117	220	452	677	1,300	2,080	3,670	7,490
90	52	110	207	424	635	1,220	1,950	3,450	7,030
100	50	104	195	400	600	1,160	1,840	3,260	6,640
125	44	92	173	355	532	1,020	1,630	2,890	5,890
150	40	83	157	322	482	928	1,480	2,610	5,330
175	37	77	144	296	443	854	1,360	2,410	4,910
200	34	71	134	275	412	794	1,270	2,240	4,560
250	30	63	119	244	366	704	1,120	1,980	4,050
300	27	57	108	221	331	638	1,020	1,800	3,670
350	25	53	99	203	305	587	935	1,650	3,370
400	23	49	92	189	283	546	870	1,540	3,140

Liquid Propane

Inlet Pressure: 11.0 in w.c.
Pressure Drop: 0.5 in w.c.
Specific Gravity: 1.50

Liquid Propane gas flow is given in thousands of BTU/hour. One cubic foot of LP gas = 2516 BTU's. **This chart refers to low pressure Liquid Propane, after regulation.** Pipe length must include additional length for all fittings. Add approximately 5 feet of pipe per fitting. Liquid Propane Example: A burner that requires 787,000 BTU would need a 1" pipe for a 20' long run.

PIPE SIZE (inches)									
Nominal	½"	¾"	1"	1 ¼"	1 ½"	2"	2 ½"	3"	4"
Actual ID	0.622	0.824	1.049	1.380	1.610	2.067	2.469	3.068	4.026
Length (ft)	Capacity in Cubic Feet of Gas per Hour								
10	291	608	1,150	2,350	3,520	6,790	10,800	19,100	39,000
20	200	418	787	1,620	2,420	4,660	7,430	13,100	26,800
30	160	336	632	1,300	1,940	3,750	5,970	10,600	21,500
40	137	287	541	1,110	1,660	3,210	5,110	9,030	18,400
50	122	255	480	985	1,480	2,840	4,530	8,000	16,300
60	110	231	434	892	1,340	2,570	4,100	7,250	14,800
80	101	212	400	821	1,230	2,370	3,770	6,670	13,600
100	94	197	372	763	1,140	2,200	3,510	6,210	12,700
125	89	185	349	716	1,070	2,070	3,290	5,820	11,900
150	84	175	330	677	1,010	1,950	3,110	5,500	11,200
175	74	155	292	600	899	1,730	2,760	4,880	9,950
200	67	140	265	543	814	1,570	2,500	4,420	9,010
250	62	129	243	500	749	1,440	2,300	4,060	8,290
300	58	120	227	465	697	1,340	2,140	3,780	7,710
350	51	107	201	412	618	1,190	1,900	3,350	6,840
400	46	97	182	373	560	1,080	1,720	3,040	6,190

Disclaimers & Recommendations

CONSULT WITH A LOCAL GAS PROFESSIONAL TO DETERMINE ACCURATE BTU AVAILABILITY. Use this chart as a guideline ONLY and does NOT account for variations in the type of pipe (plastic or iron.) Chart does NOT account for other appliances, meter pressure, or fittings. Contact a gas professional to verify your gas pressure. Warming Trends is not a licensed gas professional and is NOT able to calculate accurate BTU availability. Numbers are in thousands of BTU's.