

# PLASTIC: SIZING

## Natural Gas Underground Plastic Piping

Standard Pressure: 6-7" W.C. Maximum capacity in CFH (1000BTU per cubic foot) at 6-7" W.C. and 1/2" W.C. drop.

Tubing Size	Tubing Length (ft.)													
	10	20	30	40	50	60	70	80	90	100	125	150	175	200
1/2" CTS	56	38	31	26	23	21	19	18	17	16	14	13	12	11
3/4" IPS	360	250	200	170	151	138	125	118	110	103	93	84	77	72
1" IPS	680	465	375	320	285	260	240	220	205	195	175	160	145	135
1-1/4" IPS	1400	950	770	660	580	530	490	460	430	400	360	325	300	280
2" IPS	3950	2750	2200	1900	1680	1520	1400	1300	1220	1150	1020	950	850	800

Based on 0.60 Specific Gravity Gas

Note: CTS-Copper Tube Size, 1/2" only, (taken from table 10-4, National Fuel Gas Code manual)

IPS-Nominal Iron Pipe Size, (taken from Table 10-2, National Fuel Gas Code Manual.

Remember to de-rate the capacities where heat content is less than 1000 BTU per cubic foot.

## Liquefied Petroleum Gas Underground Plastic Piping

Tubing Size	Tubing Length (ft.)														
	5	10	15	20	25	30	40	50	60	70	80	90	100	125	150
1/2" CTS	2476	1662	1316	1116	981	884	749	659	593	543	503	470	442	389	350
3/4" IPS	14234	9555	7568	6414	5642	5080	4306	3787	3410	3121	2890	2701	2542	2236	2014
1" CTS	18455	12388	9812	8316	7315	6587	5583	4910	4422	4047	3747	3502	3296	2899	2611
1" IPS	26296	17652	13981	11849	10423	9385	7954	6997	6300	5756	5340	4990	4697	4131	3720
1-1/4" IPS	47252	31720	25123	21293	18729	16865	14294	12572	11321	10361	9595	8967	8440	7423	6685
2" IPS	133476	89601	70967	60148	52905	47640	40376	35514	31980	29267	27104	25329	23840	20970	18882

Tubing Size	Tubing Length (ft.)														
	200	250	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500
1/2" CTS	297	261	235	199	175	158	144	134	125	118	111	106	101	97	93
3/4" IPS	1707	1501	1352	1146	1008	907	830	769	719	675	640	609	582	557	536
1" CTS	2213	1946	1753	1485	1306	1176	1077	997	932	877	830	790	754	723	695
1" IPS	3153	2773	2497	2116	1862	1676	1534	1421	1328	1250	1183	1125	1075	1030	990
1-1/4" IPS	5665	4983	4487	3803	3345	3012	2757	2553	2386	2246	2126	2022	1931	1851	1779
2" IPS	16004	14077	12676	10743	9449	8509	7787	7212	6739	6343	6005	5712	5455	5227	5024

Maximum Capacity of PE Pipe in thousands of BTU per Hour of Liquefied Petroleum Gas with a Gas Pressure of 10.0 psi and a Pressure Drop of 1.0 psi (based on a 1.52 specific gravity gas)

Based on information provided by Oil Creek Plastic