

Comfort Aire

80% Mobile Home Orifice Chart

Found in IOM Book

https://ww.marsdelivers.com/images/HCdocs/MG1E_IOM.pdf

LOCAL HEATING VALUES FOR NATURAL GAS									
ALTITUDE ABOVE SEA LEVEL	BTU PER CUBIC FOOT								
	650	700	750	800	850	900	950	1,000	1,050
2,000 FT	LOW	LOW	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH
3,000 FT	LOW	LOW	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH
4,000 FT	LOW	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH
5,000 FT	LOW	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH
6,000 FT	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH
7,000 FT	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH
8,000 FT	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
9,000 FT	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
10,000 FT	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH

[Utah Cities Elevation Chart: Click Here](#)

Table 10. Natural Gas Heating Values

NATURAL GAS - HIGH HEATING VALUE					
ALTITUDE ABOVE SEA LEVEL	FURNACE MODELS				MANIFOLD PRESSURE IS 3.5 IN WC (GAS VALVE SETTING FOR NAT. GAS)
	MG1-056	MG1-070	MG1-077	MG1-090	
0 to 1,999 FT	29	24	21	17	Factory Orifice Size
2,000 to 2,999 FT	29	26	23	18	Service Orifice Size
3,000 to 3,999 FT	30 COM 661030R	26 COM 661026R	24 Not Stocked	19 Not stocked	Service Orifice Size
4,000 to 4,999 FT Salt Lake 4226 ft	30 COM 661030R	27 COM 661027	25 COM 661025R	20 COM 661020R	Service Orifice Size Grantsville 4304 Salt Lake 4226 ft Logan 4534 ft
5,000 to 5,999 FT	30 COM 661030R	28 COM 661028	26 COM 661026R	21 COM 661021R	Service Orifice Size Roosevelt 5095 ft Toole 5043 ft
6,000 to 6,999 FT	30 COM 661030R	28 COM 661028	27 COM 661027	22 COM 661022	Service Orifice Size Kamas 6486 ft
7,000 to 7,999 FT	31 COM 661031	29 COM 661029R	27 COM 661027	23 COM 661023R	Service Orifice Size Park City 7000 ft
8,000 to 8,999 FT	31	29	28	24	Service Orifice Size
9,000 to 9,999 FT	32	30	29	25	Service Orifice Size

PROPANE GAS					
ALTITUDE ABOVE SEA LEVEL	FURNACE MODELS				MANIFOLD PRESSURE IS 10 IN WC (GAS VALVE SETTING FOR LP GAS)
	MG1-056	MG1-070	MG1-077	MG1-090	
0 to 1,999 FT	45	42	40	36	Conversion Orifice Size
2,000 to 2,999 FT	47	42	41	37	Service Orifice Size
3,000 to 3,999 FT	47 COM 661047R	43 COM 661043R	42 COM 661042R	38 Not Stocked	Service Orifice Size
4,000 to 4,999 FT Salt Lake 4226 ft	47 COM 661047R	43 COM 661043R	42 COM 661042R	39 Not Stocked	Service Orifice Size Grantsville 4304 Salt Lake 4226 ft Logan 4534 ft
5,000 to 5,999 FT	48 COM 661048R	44 COM 661044R	43 COM 661043R	40 COM 661040R	Service Orifice Size Roosevelt 5095 ft Toole 5043 ft
6,000 to 6,999 FT	48 COM 661048R	44 COM 661044R	43 COM 661043R	41 COM 661041R	Service Orifice Size Kamas 6486 ft
7,000 to 7,999 FT	49 COM 661049R	44 COM 661044R	43 COM 661043R	42 COM 661042R	Service Orifice Size Park City 7000 ft
8,000 to 8,999 FT	49	45	44	42	Service Orifice Size
9,000 to 9,999 FT	50	46	45	43	Service Orifice Size

NOTES: Includes 4% Input Reduction for Each 1,000 Feet. Reference Sources: ANSI Z223.1, CSA B149.1, NFPA 54, National Fuel Gas Code.

Comfort Aire

Mobile Home

90% Orifice Chart

Taken from IOM Book

https://w.marsdelivers.com/images/HCdocs/MG2R_IOM.pdf

ORIFICES FOR PROPANE GAS MANIFOLD PRESSURE = 10 IN. W.C.			
ALTITUDE ABOVE SEA LEVEL	INPUT (BTU)		
	45,000	60,000	72,000
0 to 1,999 FT	57	55	56
2,000 to 2,999 FT	57	55	56
3,000 to 3,999 FT	57	55	56
4,000 to 4,999 FT	57	56	56
5,000 to 5,999 FT	58	56	56
6,000 to 6,999 FT	59	56	57
7,000 to 7,999 FT	59	56	57
8,000 to 8,999 FT	60	56	57
9,000 to 9,999 FT	61	57	57

Table 9. Orifices for Propane Gas

LOCAL HEATING VALUES FOR NATURAL GAS									
ALTITUDE ABOVE SEA LEVEL	BTU PER CUBIC FOOT								
	650	700	750	800	850	900	950	1,000	1,050
2,000 FT	LOW	LOW	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH
3,000 FT	LOW	LOW	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH
4,000 FT	LOW	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH
5,000 FT	LOW	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH
6,000 FT	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH
7,000 FT	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH
8,000 FT	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
9,000 FT	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
10,000 FT	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH

Table 10. Natural Gas Heating Values

HIGH HEATING VALUE & MANIFOLD PRESSURE = 3.5 IN. W.C.			
ALTITUDE ABOVE SEA LEVEL	INPUT (BTU)		
	45,000	60,000	72,000
0 to 1,999 FT	49	45	47
2,000 to 2,999 FT	50	46	48
3,000 to 3,999 FT	50	46	48
4,000 to 4,999 FT	51	47	48
5,000 to 5,999 FT	51	47	49
6,000 to 6,999 FT	51	48	49
7,000 to 7,999 FT	52	48	50
8,000 to 8,999 FT	52	49	50
9,000 to 9,999 FT	52	49	50

**Table 11. Orifices for Natural Gas
High Heating Value**

LOW HEATING VALUE & MANIFOLD PRESSURE = 3.5 IN. W.C.			
ALTITUDE ABOVE SEA LEVEL	INPUT (BTU)		
	45,000	60,000	72,000
0 to 1,999 FT	49	45	47
2,000 to 2,999 FT	49	45	47
3,000 to 3,999 FT	49	45	47
4,000 to 4,999 FT	50	45	47
5,000 to 5,999 FT	50	45	47
6,000 to 6,999 FT	50	46	48
7,000 to 7,999 FT	51	47	48
8,000 to 8,999 FT	51	47	49
9,000 to 9,999 FT	51	48	49

**Table 12. Orifices for Natural Gas
Low Heating Value**

Legacy

Coleman Orifice Chart

COLEMAN HIGH ALTITUDE DERATION CHART: DGAA, DGAH, DGPA, DGPH

NATURAL GAS

Elevation Feet	56,000 — Input				70,000 — Input			77,000 — Input			90,000 — Input		
	Meters	Orifice Dia.	Drill Size	Part #	Orifice Dia.	Drill Size	Part #	Orifice Dia.	Drill Size	Part #	Orifice Dia.	Drill Size	Part #
Sea Level		0.136	29	9951-1361	0.154	23	9951-1541	0.161	20	9951-1611	0.180	15	9951-1801
2,000	618	0.136	29	9951-1361	0.149	25	9951-1491	0.157	22	9951-1571	0.177	16	9951-1771
3,000	914	0.128	30	9951-1281	0.149	25	9951-1491	0.157	22	9951-1571	0.173	17	9951-1731
4,000	1219	0.128	30	9951-1281	0.147	26	9951-1471	0.154	23	9951-1541	0.173	17	9951-1731
5,000	1524	0.128	30	9951-1281	0.144	27	9951-1441	0.152	24	9951-1521	0.169	18	9951-1691
6,000	1829	0.128	30	9951-1281	0.144	27	9951-1441	0.149	25	9951-1491	0.166	19	9951-1661
7,000	2134	0.120	31	9951-1201	0.140	28	9951-1401	0.147	26	9951-1471	0.161	20	9951-1611
8,000	2438	0.120	31	9951-1201	0.136	29	9951-1361	0.144	27	9951-1441	0.161	20	9951-1611
9,000	2743	0.120	31	9951-1201	0.136	29	9951-1361	0.140	28	9951-1401	0.157	22	9951-1571
10,000	3048	0.116	32	9951-1161	0.128	30	9951-1281	0.136	29	9951-1361	0.152	24	9951-1521

PROPANE GAS

Elevation Feet	56,000 — Input				70,000 — Input			77,000 — Input			90,000 — Input		
	Meters	Orifice Dia.	Drill Size	Part #	Orifice Dia.	Drill Size	Part #	Orifice Dia.	Drill Size	Part #	Orifice Dia.	Drill Size	Part #
Sea Level		0.082	45	9951-0821	0.093	42	9951-0931	0.098	40	9951-0981	0.106	36	9951-1061
2,000	618	0.081	46	9951-0811	0.093	42	9951-0931	0.096	41	9951-0961	0.104	37	9951-1041
3,000	914	0.078	47	9951-0781	0.089	43	9951-0891	0.093	42	9951-0931	0.101	38	9951-1011
4,000	1219	0.078	47	9951-0781	0.089	43	9951-0891	0.093	42	9951-0931	0.101	38	9951-1011
5,000	1524	0.078	47	9951-0781	0.089	43	9951-0891	0.093	42	9951-0931	0.099	39	9951-0991
6,000	1829	0.076	48	9951-0761	0.086	44	9951-0861	0.089	43	9951-0891	0.098	40	9951-0981
7,000	2134	0.076	48	9951-0761	0.086	44	9951-0861	0.089	43	9951-0891	0.096	41	9951-0961
8,000	2438	0.073	49	9951-0731	0.082	45	9951-0821	0.086	44	9951-0861	0.096	41	9951-0961
9,000	2743	0.073	49	9951-0731	0.081	46	9951-0811	0.086	44	9951-0861	0.093	42	9951-0931
10,000	3048	0.070	50	9951-0700	0.078	47	9951-0781	0.082	45	9951-0821	0.089	43	9951-0891

Table shows 4% Input Reduction per 1,000 feet Elevation. Reference Source: NFPA No. 54, ANSI Z 223.1, National Fuel Gas Code.
For Canadian installation, no orifice or manifold pressure reduction is required for 0-4, 500ft.