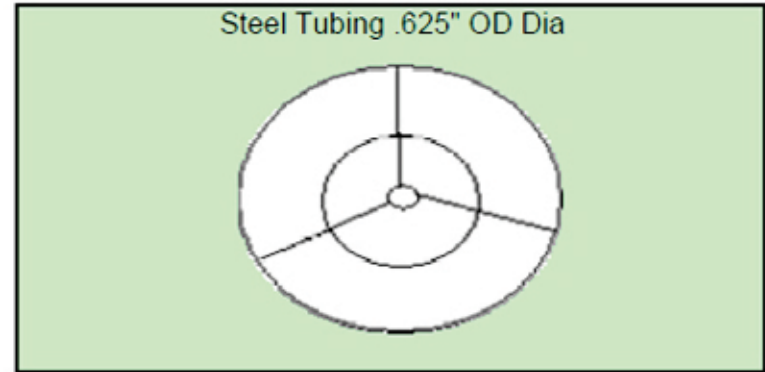


19" Diameter Fire Rings - Hole to Pipe Ratios & BTU Ratings

Hole DIA	0.0625	Area of Hole	0.003067962
ID PIPE DIA	0.5	Total Area of Holes	0.064427193
No. Holes	21	Pipe Section Area	0.196349541
		Ratio (? : 1)	3.047619048



Gas	Gas Constant, #f Ft/(#m R)	STD density, #m/cu ft	Orifice constant, estimated	Inlet Pressure, inches of H2O	Temp, F	Mass flow, #m/sec	Estimated Heat Flux, BTU/sec	Estimated Heat Flux, BTU/min	Estimated Heat Flux, BTU/hr
Methane	96.21	0.0419	0.5	1.00	70	0.0007	18.25	1,095	65,694
			0.5	2.00	70	0.0010	25.81	1,548	92,906
			0.5	3.00	70	0.0013	31.61	1,896	113,786
			0.5	3.00	70	0.0013	31.61	1,896	113,786
Propane	35.04	0.1140	0.5	1.00	70	0.0012	11.11	667	40,010
			0.5	2.00	70	0.0017	15.72	943	56,582
			0.5	3.00	70	0.0021	19.25	1,155	69,299
			0.5	4.00	70	0.0024	22.23	1,334	80,020