TABLE 13-6
Size of Gas/Vacuum Piping

Medical System	Gas Pipe Size[2]	Maximum Delivery Capacity[3] in L/min Length of Piping in metres[1]				
	mm	30	80	150	225	300
Oxygen	15	425	300	210	167	144
	20	1,133	801	555	445	377
	25	1,416	1,416	1,138	912	784
Nitrous Oxide	15	425	269	184	150	127
	20	849	699	484	388	331
	25	1,133	1,133	983	799	688
Medical Air	15	513	314	221	178	150
	20	1,133	847	595	467	399
	25	1,416	1,416	1,192	1,014	827
Vacuum	25	646	388	269	215	184
	32	1,135	694	473	377	317
	40	1,804	1,102	759	598	507
	50	3,758	2,305	1,586	1,274	1,085
Nitrogen	15	708	708	708	674	583
	20	1,699	1,699	1,699	1,699	1,535
	25	3,115	3,115	3,115	3,115	3,115

[1] Length of piping includes a 30% allowance for fittings.

[2] 15mm (0.5 in.) diameter pipe is the minimum size allowed in medical gas systems.

[3] Based on the following maximum pressure drops:
Oxygen, nitrous oxide, and medical air – 25cm Hg (10 in. Hg)
Vacuum – 10cm Hg (4 in. Hg)
Nitrogen – 104cm Hg (40 in. Hg)

SI: 1mm = 0.04 in.; 1m = 3.3 ft.; 1cm Hg = 0.4 in. Hg; 1L/min = 0.04 ft.^{3}/min

TABLE 13-7
Maximum Pipe Support Spacing
[NFPA 99:5.1.10.10.4.5]

Pipe Size	Outside Dimension mm	Hanger Spacing m
DN8	10	1.5
DN10	13	1.8
DN15	16	1.8
DN20	22	2.1
DN25	29	2.4
DN32	35	2.7
DN40 and larger	42	3.0
Vertical risers, all sizes Every floor but not to exceed:		4.6

SI: 1mm = 0.04 in.; 1m = 3.3 ft.