

Table 12-18

UNIFORM PLUMBING CODE OF ABU DHABI:
AN ENVIRONMENTAL GUIDE FOR
WATER SUPPLY AND SANITATION

TABLE 12-18 Corrugated Stainless Steel Tubing (CSST) [NFPA 54: Table 6.2(m)]

										Gas: Natural				
										Inlet Pressure: Less than 0.138bar				
										Pressure Drop: 12.7mm w.c.				
										Specific Gravity: 0.6				
	Tube Size (EHD)*													
Flow Designation:	13	15	18	19	23	25	30	31	37	39	46	48	60	62
Length (m)	Capacity in m ³ /h													
1.6	1.3	1.8	3.3	3.8	6.4	7.6	13.3	15.5	25.3	29.4	50.7	58.6	103.6	117.2
3	0.9	1.2	2.3	2.7	4.6	5.4	9.3	10.8	18.1	21.1	35.7	41.6	73.6	82.9
4.5	0.7	1.0	1.9	2.2	3.7	4.4	7.6	8.8	14.8	17.4	29.2	34.0	60.6	67.9
6	0.6	0.9	1.6	1.9	3.3	3.9	6.5	7.6	12.9	15.2	25.1	29.7	52.4	58.9
7.5	0.5	0.8	1.5	1.7	2.9	3.5	5.8	6.8	11.6	13.6	22.4	26.5	47.0	52.7
9	0.5	0.7	1.3	1.6	2.7	3.2	5.3	6.2	10.6	12.5	20.5	24.2	43.0	48.1
21	0.4	0.6	1.2	1.3	2.3	2.7	4.6	5.3	9.2	10.9	17.7	21.0	37.4	41.6
15	0.4	0.5	1.0	1.2	2.1	2.5	4.1	4.8	8.3	9.8	15.8	18.8	33.4	37.4
18	0.3	0.5	1.0	1.1	1.9	2.3	3.7	4.3	7.6	9.0	14.4	17.2	30.6	34.0
21	0.3	0.5	0.9	1.0	1.8	2.1	3.4	4.0	7.0	8.4	13.3	15.9	28.3	31.4
24	0.3	0.4	0.8	0.9	1.7	2.0	3.2	3.7	6.6	7.8	12.5	14.9	26.6	29.4
27	0.3	0.4	0.8	0.9	1.6	1.8	3.0	3.5	6.2	7.4	11.7	14.1	25.1	27.8
30	0.3	0.4	0.7	0.8	1.5	1.8	2.9	3.3	5.9	7.0	11.1	13.4	23.9	26.4
45	0.2	0.3	0.6	0.7	1.2	1.4	2.2	2.6	4.8	5.8	9.1	11.0	19.6	21.6
60	0.2	0.3	0.5	0.6	1.1	1.2	2.0	2.3	4.2	5.1	7.8	9.5	17.0	18.7
75	0.1	0.2	0.5	0.5	1.0	1.1	1.8	2.1	3.8	4.6	7.0	8.5	15.2	16.7
90	0.1	0.2	0.4	0.5	0.9	1.0	1.6	1.9	2.7	4.2	6.4	7.8	13.9	15.3

*EHD = Equivalent Hydraulic Diameter, which is a measure of the relative hydraulic efficiency between different tubing sizes. The greater the value of EHD, the greater the gas capacity of the tubing.

Notes:

(1) Table includes losses for four 90 degree bends and two end fittings. Tubing runs with larger numbers of bends and/or fillings shall be increased by an equivalent length of tubing to the following equation: $L = 1.3n$, where L is additional length (ft) of tubing and n is the number of additional fittings and/or bends.

(2) All table entries are rounded to 3 significant digits.

SI: 1m = 3.3 ft.; 1mm = 0.04 in.; 1m³ = 33.3 ft.³; 1bar = 14.5 psi