

Table 12-36

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

TABLE 12-36 Corrugated Stainless Steel Tubing (CSST) [NFPA 54: Table 6.3(i)]

INTENDED USE: CSST Sizing Between 0.138bar Service and Line Pressure Regulator														
Tube Size (EHD)*														
Flow Designation:	13	15	18	19	23	25	30	31	37	39	46	48	60	62
Length (m)	Capacity in kW													
3	124.8	163.5	271.6	325.2	509.8	635.8	1,201.3	1,383.0	2,089.1	2,331.7	4,453.6	4,922.4	8,614.2	10,020.6
7.5	76.8	101.7	173.2	205.4	328.2	404.3	750.1	864.4	1,336.1	1,508.1	2,798.2	3,135.1	5,508.4	6,358.1
9	69.7	92.6	158.2	187.5	301.8	372.1	682.7	788.2	1,224.7	1,382.7	2,552.0	2,868.5	5,039.6	5,801.4
12	59.5	79.4	137.4	162.3	262.5	322.3	588.9	679.8	1,063.6	1,206.0	2,206.3	2,490.5	4,365.7	5,039.6
15	53.0	71.2	123.1	145.3	236.2	288.9	524.5	606.5	955.2	1,084.7	1,971.9	2,229.7	3,926.2	4,512.2
22.5	43.1	57.4	100.8	119.0	194.3	237.0	427.8	495.2	785.2	894.5	1,605.6	1,825.4	3,223.0	3,691.8
24	41.0	55.4	97.6	115.1	188.4	225.0	413.1	477.6	758.9	867.6	1,552.9	1,769.7	3,105.8	3,574.6
30	36.3	49.5	87.3	102.6	169.4	206.0	369.2	424.9	682.7	780.0	1,388.8	1,585.1	2,792.3	3,193.7
45	29.6	40.1	71.8	84.1	139.8	168.5	298.9	345.7	559.6	643.1	1,131.0	1,298.0	2,288.3	2,604.8
60	25.2	34.6	62.4	72.7	121.6	146.8	257.8	298.9	486.4	561.1	978.6	1,125.1	1,986.5	2,259.0
75	22.6	30.8	56.0	65.0	109.3	131.3	230.0	266.6	436.6	504.5	873.1	1,007.9	1,781.4	2,021.7
90	20.2	28.1	50.7	59.5	100.5	120.4	209.8	242.9	398.5	462.4	797.0	923.0	1,629.1	1,845.9
120	17.6	24.0	44.2	51.3	87.3	104.0	180.5	209.8	339.9	403.2	688.6	799.9	1,415.2	1,599.8
150	15.5	21.1	39.6	46.3	78.5	93.5	161.2	186.9	301.8	362.4	615.3	717.9	1,268.7	1,429.8

*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 does not include effect of pressure drop across the line regulator. Where regulator loss exceeds 0.035 bar (based on 330 mm w.c. outlet pressure), do not use this table. Consult with regulator manufacturer for pressure drops and capacity factors. Pressure drops across a regulator may vary with flow rate.
- (2) CAUTION: Capacities shown in table may exceed maximum capacity for a selected regulator. Consult with regulator or tubing manufacturer for guidance.
- (3) Table includes losses for four 90 degree bends and two end fittings. Tubing runs with larger number of bends and/or fittings shall be increased by an equivalent length of tubing according to the following equation:

$$L = 1.3n$$
where L is additional length (ft) of tubing and 11, is the number of additional fittings and/or bends.
- (4) 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