

**Table B.9.7.D**  
**EQUIVALENT LENGTH OF PIPE FOR FRICTION LOSS IN SCHEDULE 80 CPVC FITTINGS**

Fitting	Equivalent Feet of Pipe for Various Pipe Sizes										
	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"
45 deg Elbow	0.7	1.0	1.2	1.7	2.0	2.6	3.1	3.8	5.0	6.4	7.6
90 deg Elbow	1.3	1.8	2.3	3.1	3.7	4.8	5.7	7.2	9.5	11.9	14.3
Tee, Run	0.9	1.2	1.6	2.1	2.5	3.2	3.8	4.8	6.3	7.9	9.5
Tee, Branch	2.6	3.6	4.7	6.3	7.4	9.6	11.5	14.3	18.9	23.8	28.5

**Table B.9.7.E**  
**EQUIVALENT LENGTH OF PIPE**  
**FOR FRICTION LOSS IN CPVC SDR 11 CTS TUBING FITTINGS**

Fitting	Equivalent Feet of Pipe for Various Pipe Sizes					
	1/2" CTS	3/4" CTS	1" CTS	1-1/4" CTS	1-1/2" CTS	2" CTS
45 deg Elbow	0.8	1.1	1.4	1.8	2.2	2.8
90 deg Elbow	1.6	2.1	2.6	3.5	4.0	5.2
Tee, Run	1.0	1.4	1.8	2.3	2.7	3.5
Tee, Branch	3.1	4.1	5.3	6.9	8.1	10.3

### **B.9.8 Determination of Flow Rates Corresponding to Uniform Pipe Friction Loss**

Flow rates corresponding to any given uniform pipe friction loss may be determined readily for each nominal size of the kind of pipe selected for the system. Pipe friction charts (B.9.8.1 through B.9.8.7) are presented herewith for each of the standard piping materials used for water supply systems in buildings. The appropriate chart to apply in any given case depends upon the kind of piping to be used and the effect the water to be conveyed will produce within the piping after extended service.

These charts are based on piping in average service. If piping is used in adverse service or in retrofit applications, conservative practice suggests selecting lower flow rates for a given pipe, or larger pipe for a given required flow rate.

For new work, with the range of materials now available, select a piping material that will not be affected by the water characteristics at the site.