

Rainwater Harvesting: System Planning

Table A.5. Friction loss equivalent as pipe length (ft) (CIDWT, 2008)

Diameter of Fitting (in.)	90 Degree Standard Ell	45 Degree Standard Ell	90 Degree Standard Tee	coupling or Straight Run Of Tee	Gate Valve	Globe Valve	Check Valve
	Friction Loss Equivalent as Pipe Length (ft)						
3/8	1	0.6	1.5	0.3	0.2	8	3
1/2	2	1.2	3	0.6	0.4	15	5
3/4	2.5	1.5	4	0.8	0.5	20	7
1	3	1.8	5	0.9	0.6	25	8
1 1/4	4	2.4	6	1.2	0.8	35	11
1 1/2	5	3	7	1.5	1	45	14
2	7	4	10	2	1.3	55	19
2 1/2	8	5	12	2.5	1.6	65	22
3	10	6	15	3	2	80	27
3 1/2	12	7	18	3.6	2.4	100	32
4	14	8	21	4	2.7	125	38
5	17	10	25	5	3.3	140	46
6	20	12	30	6	4	165	54