

**FLOW VELOCITY & FRICTION LOSS - SCHEDULE 80**

GALLONS/ MINUTE	1/2 in.			3/4 in.			1 in.			1 1/4 in.			1 1/2 in.			2 in.			2 1/2 in.			3 in.		
	VELOCITY Ft. / Second	FRICTION LOSS Ft. Water / 100 Ft.	FRICTION LOSS PSI / 100 Ft.	VELOCITY Ft. / Second	FRICTION LOSS Ft. Water / 100 Ft.	FRICTION LOSS PSI / 100 Ft.	VELOCITY Ft. / Second	FRICTION LOSS Ft. Water / 100 Ft.	FRICTION LOSS PSI / 100 Ft.	VELOCITY Ft. / Second	FRICTION LOSS Ft. Water / 100 Ft.	FRICTION LOSS PSI / 100 Ft.	VELOCITY Ft. / Second	FRICTION LOSS Ft. Water / 100 Ft.	FRICTION LOSS PSI / 100 Ft.	VELOCITY Ft. / Second	FRICTION LOSS Ft. Water / 100 Ft.	FRICTION LOSS PSI / 100 Ft.	VELOCITY Ft. / Second	FRICTION LOSS Ft. Water / 100 Ft.	FRICTION LOSS PSI / 100 Ft.	VELOCITY Ft. / Second	FRICTION LOSS Ft. Water / 100 Ft.	FRICTION LOSS PSI / 100 Ft.
1	1.48	4.02	1.74	0.74	0.86	0.37	0.94	0.88	0.38	0.52	0.21	0.09	0.38	0.10	0.041	0.56	0.10	0.040	0.39	0.05	0.022	0.25	0.02	0.009
2	2.95	8.03	3.48	1.57	1.72	0.74	1.88	1.76	0.74	1.12	0.42	0.18	0.76	0.20	0.082	0.78	0.15	0.065	0.54	0.07	0.032	0.35	0.028	0.012
5	7.39	45.23	19.59	3.92	9.67	4.19	4.68	5.04	4.16	2.60	2.30	1.00	1.32	0.55	0.24	1.12	0.29	0.13	0.78	0.12	0.052	0.50	0.04	0.017
7	10.34	83.07	35.97	5.49	17.76	7.69	4.68	5.04	4.16	2.60	2.30	1.00	1.32	0.55	0.24	1.12	0.29	0.13	0.78	0.12	0.052	0.50	0.04	0.017
10				7.84	33.84	14.65	4.68	9.61	4.16	2.60	2.30	1.00	1.88	1.04	0.45	1.12	0.29	0.13	0.78	0.12	0.052	0.50	0.04	0.017
15	4 in.			11.76	71.70	31.05	7.01	20.36	8.82	3.90	4.87	2.11	2.81	2.20	0.95	1.68	0.62	0.27	1.17	0.26	0.11	0.75	0.09	0.039
20	0.57	0.04	0.017	5 in.			9.35	34.68	15.02	5.20	8.30	3.59	3.75	3.75	1.62	2.23	1.06	0.46	1.56	0.44	0.19	1.00	0.15	0.065
25	0.72	0.06	0.026	11.69	52.43	22.70	11.69	52.43	22.70	6.50	12.55	5.43	4.69	5.67	2.46	2.79	1.60	0.69	1.95	0.67	0.29	1.25	0.22	0.095
30	0.86	0.08	0.035	0.54	0.03	0.013	14.03	73.48	31.82	7.80	17.59	7.62	5.63	7.95	3.44	3.35	2.25	0.97	2.34	0.94	0.41	1.49	0.31	0.13
35	1.00	0.11	0.048	0.63	0.04	0.017				9.10	23.40	10.13	6.57	10.58	4.58	3.91	2.99	1.29	2.73	1.25	0.54	1.74	0.42	0.18
40	1.15	0.14	0.061	0.72	0.04	0.017				10.40	29.97	12.98	7.50	13.55	5.87	4.47	3.83	1.66	3.12	1.60	0.69	1.99	0.54	0.23
45	1.29	0.17	0.074	0.81	0.06	0.026	6 in.			11.70	37.27	16.14	8.44	16.85	7.30	5.03	4.76	2.07	3.51	1.99	0.86	2.24	0.67	0.29
50	1.43	0.21	0.091	0.90	0.07	0.030	0.63	0.03	0.013	13.00	45.30	19.61	9.38	20.48	8.87	5.58	5.79	2.51	3.90	2.42	1.05	2.49	0.81	0.35
60	1.72	0.30	0.13	1.08	0.10	0.043	0.75	0.04	0.017				11.26	28.70	12.43	6.70	8.12	3.52	4.68	3.39	1.47	2.99	1.14	0.49
70	2.01	0.39	0.17	1.26	0.13	0.056	0.88	0.05	0.022							7.82	10.80	4.68	5.46	4.51	1.95	3.49	1.51	0.65
75	2.15	0.45	0.19	1.35	0.14	0.061	0.94	0.06	0.026							8.38	12.27	5.31	5.85	5.12	2.22	3.74	1.72	0.74
80	2.29	0.50	0.22	1.44	0.16	0.069	1.00	0.07	0.030							8.93	13.83	5.99	6.24	5.77	2.50	3.99	1.94	0.84
90	2.58	0.63	0.27	1.62	0.20	0.087	1.13	0.08	0.035							10.05	17.20	7.45	7.02	7.18	3.11	4.48	2.41	1.04
100	2.87	0.76	0.33	1.80	0.24	0.10	1.25	0.10	0.043	8 in.						11.17	20.90	9.05	7.80	8.72	3.78	4.98	2.93	1.27
125	3.59	1.16	0.50	2.25	0.37	0.16	1.57	0.16	0.068	0.90	0.045	0.019							9.75	13.21	5.72	6.23	4.43	1.92
150	4.30	1.61	0.70	2.70	0.52	0.23	1.88	0.22	0.095	1.07	0.05	0.022							11.70	18.48	8.00	7.47	6.20	2.68
175	5.02	2.15	0.93	3.15	0.69	0.30	2.20	0.29	0.12	1.25	0.075	0.033	10 in.									8.72	8.26	3.58
200	5.73	2.75	1.19	3.60	0.88	0.38	2.51	0.37	0.16	1.43	0.09	0.039	0.90	0.036	0.015							9.97	10.57	4.58
250	7.16	4.16	1.81	4.50	1.34	0.58	3.14	0.56	0.24	1.79	0.14	0.061	1.14	0.045	0.02							12.46	16.00	6.93
300	8.60	5.83	2.52	5.40	1.87	0.81	3.76	0.78	0.34	2.14	0.20	0.087	1.36	0.07	0.03	12 in.								
350	10.03	7.76	3.36	6.30	2.49	1.08	4.39	1.04	0.45	2.50	0.27	0.12	1.59	0.085	0.037	1.12	0.037	0.016						
400	11.47	9.93	4.30	7.19	3.19	1.38	5.02	1.33	0.58	2.86	0.34	0.15	1.81	0.11	0.048	1.28	0.05	0.022						
450				8.09	3.97	1.72	5.64	1.65	0.71	3.21	0.42	0.18	2.04	0.14	0.061	1.44	0.06	0.026						
500				8.99	4.82	2.09	6.27	2.00	0.87	3.57	0.51	0.22	2.27	0.17	0.074	1.60	0.07	0.030						
750							5.36	1.08	0.47	3.40	0.36	0.16	2.40	0.36	0.16	2.40	0.15	0.065						
1000										7.14	1.84	0.80	4.54	0.61	0.26	3.20	0.26	0.11						
1250													5.67	0.92	0.40	4.01	0.40	0.17						
1500													6.80	1.29	0.56	4.81	0.55	0.24						
2000																6.41	0.94	0.41						
2500																								

NOTE: Plast-O-Matic recommends velocities be maintained at or below 5 feet per second; breakpoint highlighted in yellow.