

**Saint-Gobain Performance Plastics
Pressure Guidelines and Flow Rates**

S.I.B. 90° Elbows

MINI					MAXI/LADISH				
FLOW RATE (GPM)	ID IN.	VELOCITY (F/S)	RESIST. COEF (K)	PRESS. DROP (PSI)	FLOW RATE (GPM)	ID IN.	VELOCITY (F/S)	RESIST. COEF (K)	PRESS DROP (PSI)
0.50	0.560	0.65	1.133	0.0032	1.00	0.856	0.56	1.168	0.0024
1.00	0.560	1.30	1.133	0.0129	2.00	0.856	1.11	1.168	0.0098
1.50	0.560	1.95	1.133	0.0291	3.00	0.856	1.67	1.168	0.0220
2.00	0.560	2.61	1.133	0.0518	4.00	0.856	2.23	1.168	0.0391
2.50	0.560	3.26	1.133	0.0809	5.00	0.856	2.79	1.168	0.0611
3.00	0.560	3.91	1.133	0.1165	6.00	0.856	3.34	1.168	0.0879
3.50	0.560	4.56	1.133	0.1585	7.00	0.856	3.90	1.168	0.1197
4.00	0.560	5.21	1.133	0.2070	8.00	0.856	4.46	1.168	0.1563
4.50	0.560	5.86	1.133	0.2620	9.00	0.856	5.02	1.168	0.1979
5.00	0.560	6.51	1.133	0.3235	10.00	0.856	5.57	1.168	0.2443
5.50	0.560	7.16	1.133	0.3914	11.00	0.856	6.13	1.168	0.2956
6.00	0.560	7.82	1.133	0.4658	12.00	0.856	6.69	1.168	0.3518
6.50	0.560	8.47	1.133	0.5467	13.00	0.856	7.25	1.168	0.4128
7.00	0.560	9.12	1.133	0.6341	14.00	0.856	7.80	1.168	0.4788
7.50	0.560	9.77	1.133	0.7279	15.00	0.856	8.36	1.168	0.5496
8.00	0.560	10.42	1.133	0.8282	16.00	0.856	8.92	1.168	0.6254
8.50	0.560	11.07	1.133	0.9349	17.00	0.856	9.48	1.168	0.7060
9.00	0.560	11.72	1.133	1.0481	18.00	0.856	10.03	1.168	0.7915
9.50	0.560	12.37	1.133	1.1678	19.00	0.856	10.59	1.168	0.8819
10.00	0.560	13.03	1.133	1.2940	20.00	0.856	11.15	1.168	0.9771
11.00	0.560	14.33	1.133	1.5657	22.00	0.856	12.26	1.168	1.1823
12.00	0.560	15.63	1.133	1.8634	24.00	0.856	13.38	1.168	1.4071

1 1/2"					2"				
FLOW RATE (GPM)	ID IN.	VELOCITY (F/S)	FRICTION LOSS (K)	PRESS. DROP (PSI)	FLOW RATE (GPM)	ID IN.	VELOCITY (F/S)	FRICTION LOSS (K)	PRESS DROP (PSI)
4.00	1.356	0.89	0.642	0.0019	5.00	1.856	0.59	0.449	0.0011
8.00	1.356	1.78	0.642	0.0075	10.00	1.856	1.19	0.449	0.0042
12.00	1.356	2.67	0.642	0.0168	15.00	1.856	1.78	0.449	0.0096
16.00	1.356	3.55	0.642	0.0299	20.00	1.856	2.37	0.449	0.0170
20.00	1.356	4.44	0.642	0.0468	30.00	1.856	3.56	0.449	0.0382
24.00	1.356	5.33	0.642	0.0674	35.00	1.856	4.15	0.449	0.0520
28.00	1.356	6.22	0.642	0.0917	40.00	1.856	4.74	0.449	0.0679
32.00	1.356	7.11	0.642	0.1198	45.00	1.856	5.34	0.449	0.0860
36.00	1.356	8.00	0.642	0.1516	50.00	1.856	5.93	0.449	0.1062
40.00	1.356	8.89	0.642	0.1872	55.00	1.856	6.52	0.449	0.1284
44.00	1.356	9.78	0.642	0.2265	60.00	1.856	7.12	0.449	0.1529
48.00	1.356	10.66	0.642	0.2695	65.00	1.856	7.71	0.449	0.1794
52.00	1.356	11.55	0.642	0.3163	70.00	1.856	8.30	0.449	0.2081
56.00	1.356	12.44	0.642	0.3668	75.00	1.856	8.89	0.449	0.2389
60.00	1.356	13.33	0.642	0.4211	80.00	1.856	9.49	0.449	0.2718
64.00	1.356	14.22	0.642	0.4791	85.00	1.856	10.08	0.449	0.3068
68.00	1.356	15.11	0.642	0.5409	90.00	1.856	10.67	0.449	0.3439
72.00	1.356	16.00	0.642	0.6064	100.00	1.856	11.86	0.449	0.4246
76.00	1.356	16.88	0.642	0.6756	120.00	1.856	14.23	0.449	0.6115
80.00	1.356	17.77	0.642	0.7486	130.00	1.856	15.42	0.449	0.7176

1 1/2"					2"				
FLOW RATE (GPM)	ID IN.	VELOCITY (F/S)	FRICTION LOSS (K)	PRESS. DROP (PSI)	FLOW RATE (GPM)	ID IN.	VELOCITY (F/S)	FRICTION LOSS (K)	PRESS DROP (PSI)
4.00	1.356	0.89	0.642	0.0019	5.00	1.856	0.59	0.449	0.0011
8.00	1.356	1.78	0.642	0.0075	10.00	1.856	1.19	0.449	0.0042
12.00	1.356	2.67	0.642	0.0168	15.00	1.856	1.78	0.449	0.0096
16.00	1.356	3.55	0.642	0.0299	20.00	1.856	2.37	0.449	0.0170
20.00	1.356	4.44	0.642	0.0468	30.00	1.856	3.56	0.449	0.0382
24.00	1.356	5.33	0.642	0.0674	35.00	1.856	4.15	0.449	0.0520
28.00	1.356	6.22	0.642	0.0917	40.00	1.856	4.74	0.449	0.0679
32.00	1.356	7.11	0.642	0.1198	45.00	1.856	5.34	0.449	0.0860
36.00	1.356	8.00	0.642	0.1516	50.00	1.856	5.93	0.449	0.1062
40.00	1.356	8.89	0.642	0.1872	55.00	1.856	6.52	0.449	0.1284
44.00	1.356	9.78	0.642	0.2265	60.00	1.856	7.12	0.449	0.1529
48.00	1.356	10.66	0.642	0.2695	65.00	1.856	7.71	0.449	0.1794
52.00	1.356	11.55	0.642	0.3163	70.00	1.856	8.30	0.449	0.2081
56.00	1.356	12.44	0.642	0.3668	75.00	1.856	8.89	0.449	0.2389
60.00	1.356	13.33	0.642	0.4211	80.00	1.856	9.49	0.449	0.2718
64.00	1.356	14.22	0.642	0.4791	85.00	1.856	10.08	0.449	0.3068
68.00	1.356	15.11	0.642	0.5409	90.00	1.856	10.67	0.449	0.3439
72.00	1.356	16.00	0.642	0.6064	100.00	1.856	11.86	0.449	0.4246
76.00	1.356	16.88	0.642	0.6756	120.00	1.856	14.23	0.449	0.6115
80.00	1.356	17.77	0.642	0.7486	130.00	1.856	15.42	0.449	0.7176