

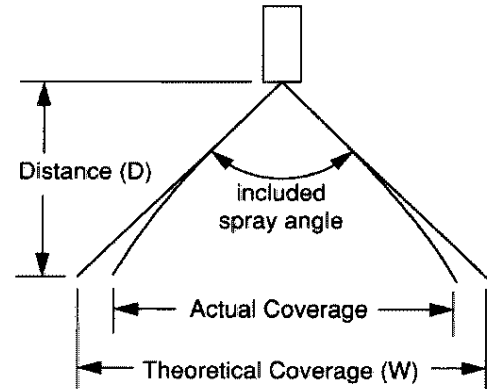
Engineering data

Table 1: Theoretical spray coverage

SPRAY ANGLE	W/D RATIO	Theoretical coverage (W) at various distances (D) from nozzle									
		Distance (D) inches									
		2	3	4	6	8	12	16	24	34	48
5°	.087	0.2	0.3	0.3	0.5	0.7	1.0	1.4	2.1	3.0	4.2
10°	.175	0.3	0.5	0.7	1.0	1.4	2.1	2.8	4.2	5.9	8.4
15°	.263	0.5	0.8	1.1	1.6	2.1	3.2	4.2	6.3	9.0	12.6
20°	.353	0.7	1.1	1.4	2.1	2.8	4.2	5.6	8.5	12.0	16.9
25°	.443	0.9	1.3	1.8	2.7	3.5	5.3	7.1	10.6	15.1	21.3
30°	.536	1.1	1.6	2.1	3.2	4.3	6.4	8.6	12.9	18.2	25.7
35°	.630	1.3	1.9	2.5	3.8	5.0	7.6	10.1	15.1	21.4	30.3
40°	.728	1.5	2.2	2.9	4.4	5.8	8.7	11.6	17.5	24.7	34.9
45°	.828	1.7	2.5	3.3	5.0	6.6	9.9	13.3	19.9	28.2	39.8
50°	.932	1.9	2.8	3.7	5.6	7.5	11.2	14.9	22.4	31.7	45
55°	1.04	2.1	3.1	4.2	6.2	8.3	12.5	16.7	25.0	35.4	50
60°	1.15	2.3	3.5	4.6	6.9	9.2	13.9	18.5	27.7	39.3	55
65°	1.27	2.5	3.8	5.1	7.6	10.2	15.3	20.4	30.6	43	61
70°	1.40	2.8	4.2	5.6	8.4	11.2	16.8	22.4	33.6	48	67
75°	1.53	3.1	4.6	6.1	9.2	12.3	18.4	24.5	36.8	52	74
80°	1.68	3.4	5.0	6.7	10.1	13.4	20.1	26.8	40	57	81
85°	1.83	3.7	5.5	7.3	11.0	14.7	22.0	29.3	44	62	88
90°	2.00	4.0	6.0	8.0	12.0	16.0	24.0	32.0	48	68	96
95°	2.18	4.4	6.5	8.7	13.1	17.5	26.2	34.9	52	74	105
100°	2.38	4.8	7.1	9.5	14.3	19.1	28.6	38.1	57	81	114
110°	2.86	5.7	8.6	11.4	17.1	22.8	34.3	46	69	97	137
120°	3.46	6.9	10.4	13.9	20.8	27.7	42	55	83	118	166
130°	4.29	8.6	12.9	17.1	25.7	34.3	51	69	103	146	206
140°	5.49	11.0	16.5	22.0	32.9	44	66	88	132	187	264
150°	7.46	14.9	22.4	29.8	45	60	89	119	179	254	358

Spray coverages shown in table 1 are based on straight-sided spray patterns. At low pressures the sides of the spray may curve in as shown below because of the acceleration due to gravity.

To find the width of spray (W) at any distance (D), multiply the W/D ratio by the distance.



CONVERSION FACTOR TABLE

Viscosity 1 N sec/m²=10 poises

Flowrate 1 U.S. G.P.M.=0.1337 ft³/min=3.785 l/min
1ft³/sec=.02832 m³/sec=28.32 litre/sec

Length 1 in=25.4 mm
1 ft=.3048 m
1 mile=1.609 km

Power 1 ft lb/sec=1.356 Watts=1.356 Joules/sec
1 hp=550 ft lb/sec=745.7 Watts

Pressure 1 psi=6895 N/m²=6895 Pa
1 in Hg=25.4 mm Hg=.4912 psi=3386 N/m²
1 in H₂O=25.4 mm H₂O=.0361 psi=249.1 N/m²
1 atmosphere=14.7 psi=29.92 in Hg.=760 mm Hg=101.325 kN/m²
1 bar=14.504 psi=100 kN/m²

Volume 1 U.S. gallon=0.1337 ft³=0.003785 m³=3.785 litre
1 ft³=0.02832 m³