

23R / 3/4" / 45° DEFLECTION

PERFORMANCE BASED ON NOMINAL SIZES SHOWN IN BOLD

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Nominal Duct Size (in.)	Nominal Duct Area (ft ²)	Core Area (ft ²)	Core Velocity Velocity Pressure Neg. Static Pressure	NC20					NC30		NC40	
				150 0.001 0.012	200 0.003 0.021	250 0.004 0.033	300 0.006 0.048	400 0.010 0.085	500 0.016 0.133	600 0.022 0.192	700 0.031 0.261	800 0.040 0.341
6x6	0.25	0.19	Airflow, cfm NC	29 -	38 -	48 -	57 12	76 19	95 25	114 29	133 33	152 36
8x6	0.33	0.26	Airflow, cfm NC	39 -	52 -	65 -	78 13	104 20	130 26	156 31	182 34	208 38
10x6	0.42	0.34	Airflow, cfm NC	51 -	68 -	85 -	102 14	136 21	170 27	204 32	238 36	272 39
8x8	0.44	0.37	Airflow, cfm NC	56 -	74 -	93 -	111 14	148 22	185 27	222 32	259 36	296 39
12x6	0.50	0.41	Airflow, cfm NC	62 -	82 -	103 -	123 15	164 22	205 28	246 32	287 36	328 40
14x6	0.58	0.48	Airflow, cfm NC	72 -	96 -	120 11	144 16	192 23	240 29	288 33	336 37	384 40
16x6 12x8	0.67 0.57	0.57	Airflow, cfm NC	86 -	114 -	143 12	171 16	228 24	285 29	342 34	399 38	456 41
10x10	0.69	0.59	Airflow, cfm NC	89 -	118 -	148 12	177 16	236 24	295 29	354 34	413 38	472 41
18x6	0.75	0.63	Airflow, cfm NC	95 -	126 -	158 12	189 17	252 24	315 30	378 34	441 38	504 42
20x6 12x10	0.83 0.72	0.72	Airflow, cfm NC	108 -	144 -	180 13	216 17	288 25	360 30	432 35	504 39	576 42
22x6	0.92	0.77	Airflow, cfm NC	116 -	154 -	193 13	231 18	308 25	385 31	462 35	539 39	616 43
24x6 12x12	1.00 0.88	0.88	Airflow, cfm NC	132 -	176 -	220 14	264 18	352 25	440 31	528 36	616 40	704 43
30x6 18x10	1.25 1.11	1.11	Airflow, cfm NC	167 -	222 -	278 15	333 19	444 26	555 32	666 37	777 41	888 44
14x14	1.36	1.22	Airflow, cfm NC	183 -	244 -	305 15	366 20	488 27	610 33	732 37	854 41	976 45
36x6 18x12	1.50 1.35	1.35	Airflow, cfm NC	203 -	270 -	338 15	405 20	540 27	675 33	810 38	945 42	1080 45
22x10	1.53	1.37	Airflow, cfm NC	206 -	274 -	343 15	411 20	548 27	685 33	822 38	959 42	1096 45
30x8 24x10	1.67 1.49	1.49	Airflow, cfm NC	224 -	298 -	373 16	447 20	596 28	745 33	894 38	1043 42	1192 45
42x6 18x14	1.75 1.59	1.59	Airflow, cfm NC	239 -	318 -	398 16	477 21	636 28	795 34	954 38	1113 42	1272 46
16x16	1.78	1.62	Airflow, cfm NC	243 -	324 11	405 16	486 21	648 28	810 34	972 38	1134 42	1296 46
24x12 18x16	2.00 1.82	1.82	Airflow, cfm NC	273 -	364 11	455 17	546 21	728 29	910 34	1092 39	1274 43	1456 46
18x18	2.25	2.07	Airflow, cfm NC	311 -	414 12	518 17	621 22	828 29	1035 35	1242 40	1449 43	1656 47
24x14	2.33	2.14	Airflow, cfm NC	321 -	428 12	535 17	642 22	856 29	1070 35	1284 40	1498 44	1712 47
30x12	2.50	2.29	Airflow, cfm NC	344 -	458 12	573 18	687 22	916 30	1145 35	1374 40	1603 44	1832 47
24x16	2.67	2.46	Airflow, cfm NC	369 -	492 12	615 18	738 23	984 30	1230 36	1476 40	1722 44	1968 48
20x20	2.78	2.57	Airflow, cfm NC	386 -	514 13	643 18	771 23	1028 30	1285 36	1542 40	1799 44	2056 48
36x12	3.00	2.75	Airflow, cfm NC	413 -	550 13	688 18	825 23	1100 30	1375 36	1650 41	1925 45	2200 48
30x16 24x20	3.33 3.11	3.11	Airflow, cfm NC	467 -	622 13	778 19	933 24	1244 31	1555 37	1866 41	2177 45	2488 49
22x22	3.36	3.14	Airflow, cfm NC	471 -	628 13	785 19	942 24	1256 31	1570 37	1884 41	2198 45	2512 49
42x12 36x14	3.50 3.22	3.22	Airflow, cfm NC	483 -	644 13	805 19	966 24	1288 31	1610 37	1932 41	2254 45	2576 49
24x22	3.67	3.43	Airflow, cfm NC	515 -	686 14	858 19	1029 24	1372 31	1715 37	2058 42	2401 46	2744 49
30x18	3.75	3.5	Airflow, cfm NC	525 -	700 14	875 20	1050 24	1400 31	1750 37	2100 42	2450 46	2800 49

• Static pressures are negative, in inches of water, measured per ANSI/ASHRAE Standard 70-2006

• NC based on room absorption of 10 dB, re 10⁻¹² watts, measured per ANSI/ASHRAE Standard 70-2006



23R / 3/4" / 45° DEFLECTION (continued)
PERFORMANCE BASED ON NOMINAL SIZES SHOWN IN BOLD

Nominal Duct Size (in.)	Nominal Duct Area (ft ²)	Core Area (ft ²)	Core Velocity Velocity Pressure Neg. Static Pressure	NC-20		NC-30		NC-40			NC-50	
				150 0.001 0.012	200 0.003 0.021	250 0.004 0.033	300 0.006 0.048	400 0.010 0.085	500 0.016 0.133	600 0.022 0.192	700 0.031 0.261	800 0.040 0.341
48x12 24x24	4.00	3.75	Airflow, cfm NC	563 -	750 14	938 20	1125 24	1500 32	1875 37	2250 42	2625 46	3000 49
36x18	4.50	4.22	Airflow, cfm NC	633 -	844 15	1055 20	1266 25	1688 32	2110 38	2532 43	2954 47	3376 50
36x20 30x24	5.00	4.71	Airflow, cfm NC	707 -	942 15	1178 21	1413 25	1884 33	2355 38	2826 43	3297 47	3768 50
42x18	5.25	4.94	Airflow, cfm NC	741 -	988 15	1235 21	1482 26	1976 33	2470 39	2964 43	3458 47	3952 51
28x28	5.44	5.16	Airflow, cfm NC	774 -	1032 16	1290 21	1548 26	2064 33	2580 39	3096 43	3612 47	4128 51
42x20 30x28	5.83	5.51	Airflow, cfm NC	827 -	1102 16	1378 21	1653 26	2204 33	2755 39	3306 44	3857 48	4408 51
48x18 36x24	6.00	5.66	Airflow, cfm NC	849 -	1132 16	1415 22	1698 26	2264 34	2830 39	3396 44	3962 48	4528 51
30x30	6.25	5.94	Airflow, cfm NC	891 -	1188 16	1485 22	1782 26	2376 34	2970 39	3564 44	4158 48	4752 51
42x24 36x28	7.00	6.66	Airflow, cfm NC	999 -	1332 17	1665 22	1998 27	2664 34	3330 40	3996 45	4662 49	5328 52
46x22	7.03	6.68	Airflow, cfm NC	1002 -	1336 17	1670 22	2004 27	2672 34	3340 40	4008 45	4676 49	5344 52
32x32	7.11	6.78	Airflow, cfm NC	1017 -	1356 17	1695 22	2034 27	2712 34	3390 40	4068 45	4746 49	5424 52
36x30	7.50	7.16	Airflow, cfm NC	1074 -	1432 17	1790 23	2148 27	2864 35	3580 40	4296 45	5012 49	5728 52
48x24 36x32	8.00	7.63	Airflow, cfm NC	1145 -	1526 17	1908 23	2289 28	3052 35	3815 41	4578 45	5341 49	6104 52
34x34	8.03	7.68	Airflow, cfm NC	1152 -	1536 17	1920 23	2304 28	3072 35	3840 41	4608 45	5376 49	6144 53
36x34	8.50	8.14	Airflow, cfm NC	1221 -	1628 18	2035 23	2442 28	3256 35	4070 41	4884 45	5698 49	6512 53
42x30	8.75	8.38	Airflow, cfm NC	1257 -	1676 18	2095 23	2514 28	3352 35	4190 41	5028 46	5866 50	6704 53
36x36	9.00	8.63	Airflow, cfm NC	1295 -	1726 18	2158 23	2589 28	3452 35	4315 41	5178 46	6041 50	6904 53
42x34 48x30	10.00	9.6	Airflow, cfm NC	1440 11	1920 18	2400 24	2880 29	3840 36	4800 42	5760 46	6720 50	7680 53
38x38	10.03	9.64	Airflow, cfm NC	1446 11	1928 18	2410 24	2892 29	3856 36	4820 42	5784 46	6748 50	7712 54
42x36	10.50	10.1	Airflow, cfm NC	1515 11	2020 18	2525 24	3030 29	4040 36	5050 42	6060 46	7070 50	8080 54
46x34	10.86	10.45	Airflow, cfm NC	1568 11	2090 19	2613 24	3135 29	4180 36	5225 42	6270 47	7315 50	8360 54
42x38	11.08	10.67	Airflow, cfm NC	1601 11	2134 19	2668 24	3201 29	4268 36	5335 42	6402 47	7469 51	8536 54
40x40	11.11	10.7	Airflow, cfm NC	1605 11	2140 19	2675 24	3210 29	4280 36	5350 42	6420 47	7490 51	8560 54
48x36	12.00	11.57	Airflow, cfm NC	1736 12	2314 19	2893 25	3471 29	4628 37	5785 42	6942 47	8099 51	9256 54
42x42	12.25	11.82	Airflow, cfm NC	1773 12	2364 19	2955 25	3546 29	4728 37	5910 42	7092 47	8274 51	9456 54
44x44	13.44	12.99	Airflow, cfm NC	1949 12	2598 20	3248 25	3897 30	5196 37	6495 43	7794 47	9093 51	10392 55
48x42	14.00	13.54	Airflow, cfm NC	2031 12	2708 20	3385 25	4062 30	5416 37	6770 43	8124 48	9478 52	10832 55
46x46	14.69	14.22	Airflow, cfm NC	2133 13	2844 20	3555 26	4266 30	5688 38	7110 43	8532 48	9954 52	11376 55
48x46	15.33	14.85	Airflow, cfm NC	2228 13	2970 20	3713 26	4455 30	5940 38	7425 43	8910 48	10395 52	11880 55
48x48	16.00	15.50	Airflow, cfm NC	2325 13	3100 20	3875 26	4650 31	6200 38	7750 44	9300 48	10850 52	12400 56

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• NC based on room absorption of 10 dB, re 10⁻¹² watts, measured per ANSI/ASHRAE Standard 70-2006