

33R RETURN / 1/2" SPACING / 38° DEFLECTION
PERFORMANCE BASED ON NOMINAL SIZES SHOWN IN BOLD

Nominal Duct Size (in.)	Nominal Duct Area sq. ft	Core Area sq. ft	Core Velocity Velocity Pressure Neg. Static Pressure	NC 10		NC 20		NC 30			NC 40	
				200 0.002 0.010	300 0.006 0.023	400 0.010 0.040	500 0.016 0.063	600 0.022 0.090	700 0.031 0.123	800 0.040 0.161	900 0.050 0.203	1000 0.062 0.251
6x6	0.25	0.19	Airflow, cfm NC	38 -	57 -	76 -	95 14	114 20	133 25	152 30	171 34	190 37
8x6	0.33	0.26	Airflow, cfm NC	52 -	78 -	104 -	130 16	156 22	182 27	208 31	234 35	260 38
10x6	0.42	0.34	Airflow, cfm NC	68 -	102 -	136 -	170 17	204 23	238 28	272 32	306 36	340 40
8x8	0.44	0.37	Airflow, cfm NC	74 -	111 -	148 -	185 17	222 23	259 28	296 33	333 37	370 40
12x6	0.50	0.41	Airflow, cfm NC	82 -	123 -	164 -	205 18	246 24	287 29	328 33	369 37	410 40
14x6	0.58	0.48	Airflow, cfm NC	96 -	144 -	192 11	240 18	288 24	336 29	384 34	432 38	480 41
16x6	0.67	0.57	Airflow, cfm	114	171	228	285	342	399	456	513	570
12x8			NC	-	-	12	19	25	30	35	38	42
10x10	0.69	0.59	Airflow, cfm NC	118 -	177 -	236 12	295 19	354 25	413 30	472 35	531 39	590 42
18x6	0.75	0.63	Airflow, cfm NC	126 -	189 -	252 12	315 20	378 26	441 31	504 35	567 39	630 42
20x6	0.83	0.72	Airflow, cfm	144	216	288	360	432	504	576	648	720
12x10			NC	-	-	13	20	26	31	36	39	43
22x6	0.92	0.77	Airflow, cfm NC	154 -	231 -	308 13	385 20	462 26	539 31	616 36	693 40	770 43
24x6	1.00	0.88	Airflow, cfm	176	264	352	440	528	616	704	792	880
12x12			NC	-	-	14	21	27	32	36	40	44
30x6	1.25	1.11	Airflow, cfm	222	333	444	555	666	777	888	999	1110
18x10			NC	-	-	15	22	28	33	37	41	45
14x14	1.36	1.22	Airflow, cfm NC	244 -	366 -	488 15	610 22	732 28	854 33	976 38	1098 42	1220 45
36x6	1.50	1.35	Airflow, cfm	270	405	540	675	810	945	1080	1215	1350
18x12			NC	-	-	16	23	29	34	38	42	46
22x10	1.53	1.37	Airflow, cfm NC	274 -	411 -	548 16	685 23	822 29	959 34	1096 38	1233 42	1370 46
30x8	1.67	1.49	Airflow, cfm	298	447	596	745	894	1043	1192	1341	1490
24x10			NC	-	-	16	23	29	34	39	43	46
42x6	1.75	1.59	Airflow, cfm	318	477	636	795	954	1113	1272	1431	1590
18x14			NC	-	-	16	24	30	35	39	43	46
16x16	1.78	1.62	Airflow, cfm NC	324 -	486 -	648 16	810 24	972 30	1134 35	1296 39	1458 43	1620 46
24x12	2.00	1.82	Airflow, cfm	364	546	728	910	1092	1274	1456	1638	1820
18x16			NC	-	-	17	24	30	35	40	43	47
18x18	2.25	2.07	Airflow, cfm NC	414 -	621 -	828 18	1035 25	1242 31	1449 36	1656 40	1863 44	2070 47
24x14	2.33	2.14	Airflow, cfm NC	428 -	642 -	856 18	1070 25	1284 31	1498 36	1712 40	1926 44	2140 48
30x12	2.50	2.29	Airflow, cfm NC	458 -	687 -	916 18	1145 25	1374 31	1603 36	1832 41	2061 44	2290 48
24x16	2.67	2.46	Airflow, cfm NC	492 -	738 -	984 18	1230 26	1476 31	1722 37	1968 41	2214 45	2460 48
20x20	2.78	2.57	Airflow, cfm NC	514 -	771 -	1028 18	1285 26	1542 32	1799 37	2056 41	2313 45	2570 48
36x12	3.00	2.75	Airflow, cfm NC	550 -	825 -	1100 19	1375 26	1650 32	1925 37	2200 41	2475 45	2750 49
30x16	3.33	3.11	Airflow, cfm	622	933	1244	1555	1866	2177	2488	2799	3110
24x20			NC	-	-	19	27	33	38	42	46	49
22x22	3.36	3.14	Airflow, cfm NC	628 -	942 -	1256 19	1570 27	1884 33	2198 38	2512 42	2826 46	3140 49
42x12	3.50	3.22	Airflow, cfm	644	966	1288	1610	1932	2254	2576	2898	3220
36x14			NC	-	-	19	27	33	38	42	46	49
24x22	3.67	3.43	Airflow, cfm NC	686 -	1029 -	1372 20	1715 27	2058 33	2401 38	2744 42	3087 46	3430 50
30x18	3.75	3.50	Airflow, cfm NC	700 -	1050 -	1400 20	1750 27	2100 33	2450 38	2800 42	3150 46	3500 50

NC 50

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

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

33R RETURN / 1/2" SPACING / 38° DEFLECTION
PERFORMANCE BASED ON NOMINAL SIZES SHOWN IN BOLD

Nominal Duct Size (in.)	Nominal Duct Area sq. ft	Core Area sq. ft	Core Velocity Velocity Pressure Neg. Static Pressure	NC 10		NC 20		NC 30		NC 40		NC 50	
				200 0.002 0.010	300 0.006 0.023	400 0.010 0.040	500 0.016 0.063	600 0.022 0.090	700 0.031 0.123	800 0.040 0.161	900 0.050 0.203	1000 0.062 0.251	
48x12 24x24	4.00	3.75	Airflow, cfm NC	750 -	1125 11	1500 20	1875 27	2250 33	2625 38	3000 43	3375 47	3750 50	
36x18	4.50	4.22	Airflow, cfm NC	844 -	1266 11	1688 21	2110 28	2532 34	2954 39	3376 43	3798 47	4220 51	
36x20 30x24	5.00	4.71	Airflow, cfm NC	942 -	1413 12	1884 21	2355 28	2826 34	3297 39	3768 44	4239 48	4710 51	
42x18	5.25	4.94	Airflow, cfm NC	988 -	1482 12	1976 21	2470 29	2964 35	3458 40	3952 44	4446 48	4940 51	
28x28	5.44	5.16	Airflow, cfm NC	1032 -	1548 12	2064 21	2580 29	3096 35	3612 40	4128 44	4644 48	5160 51	
42x20 30x28	5.83	5.51	Airflow, cfm NC	1102 -	1653 12	2204 22	2755 29	3306 35	3857 40	4408 44	4959 48	5510 52	
48x18 36x24	6.00	5.66	Airflow, cfm NC	1132 -	1698 12	2264 22	2830 29	3396 35	3962 40	4528 45	5094 48	5660 52	
30x30	6.25	5.94	Airflow, cfm NC	1188 -	1782 13	2376 22	2970 29	3564 35	4158 40	4752 45	5346 49	5940 52	
42x24 36x28	7.00	6.66	Airflow, cfm NC	1332 -	1998 13	2664 23	3330 30	3996 36	4662 41	5328 45	5994 49	6660 52	
46x22	7.03	6.68	Airflow, cfm NC	1336 -	2004 13	2672 23	3340 30	4008 36	4676 41	5344 45	6012 49	6680 53	
32x32	7.11	6.78	Airflow, cfm NC	1356 -	2034 13	2712 23	3390 30	4068 36	4746 41	5424 45	6102 49	6780 53	
36x30	7.50	7.16	Airflow, cfm NC	1432 -	2148 14	2864 23	3580 30	4296 36	5012 41	5728 46	6444 49	7160 53	
48x24 36x32	8.00	7.63	Airflow, cfm NC	1526 -	2289 14	3052 23	3815 30	4578 36	5341 41	6104 46	6867 50	7630 53	
34x34	8.03	7.68	Airflow, cfm NC	1536 -	2304 14	3072 23	3840 30	4608 36	5376 41	6144 46	6912 50	7680 53	
36x34	8.50	8.14	Airflow, cfm NC	1628 -	2442 14	3256 23	4070 31	4884 37	5698 42	6512 46	7326 50	8140 53	
42x30	8.75	8.38	Airflow, cfm NC	1676 -	2514 14	3352 24	4190 31	5028 37	5866 42	6704 46	7542 50	8380 53	
36x36	9.00	8.63	Airflow, cfm NC	1726 -	2589 14	3452 24	4315 31	5178 37	6041 42	6904 46	7767 50	8630 54	
42x34 48x30	10.00	9.60	Airflow, cfm NC	1920 -	2880 15	3840 24	4800 31	5760 37	6720 42	7680 47	8640 51	9600 54	
38x38	10.03	9.64	Airflow, cfm NC	1928 -	2892 15	3856 24	4820 31	5784 37	6748 42	7712 47	8676 51	9640 54	
42x36	10.50	10.10	Airflow, cfm NC	2020 -	3030 15	4040 24	5050 32	6060 38	7070 43	8080 47	9090 51	10100 54	
46x34	10.86	10.45	Airflow, cfm NC	2090 -	3135 15	4180 25	5225 32	6270 38	7315 43	8360 47	9405 51	10450 54	
42x38	11.08	10.67	Airflow, cfm NC	2134 -	3201 15	4268 25	5335 32	6402 38	7469 43	8536 47	9603 51	10670 55	
40x40	11.11	10.70	Airflow, cfm NC	2140 -	3210 15	4280 25	5350 32	6420 38	7490 43	8560 47	9630 51	10700 55	
48x36	12.00	11.57	Airflow, cfm NC	2314 -	3471 16	4628 25	5785 32	6942 38	8099 43	9256 48	10413 51	11570 55	
42x42	12.25	11.82	Airflow, cfm NC	2364 -	3546 16	4728 25	5910 32	7092 38	8274 43	9456 48	10638 52	11820 55	
44x44	13.44	12.99	Airflow, cfm NC	2598 -	3897 16	5196 25	6495 33	7794 39	9093 44	10392 48	11691 52	12990 55	
48x42	14.00	13.54	Airflow, cfm NC	2708 -	4062 16	5416 26	6770 33	8124 39	9478 44	10832 48	12186 52	13540 56	
46x46	14.69	14.22	Airflow, cfm NC	2844 -	4266 16	5688 26	7110 33	8532 39	9954 44	11376 49	12798 52	14220 56	
48x46	15.33	14.85	Airflow, cfm NC	2970 -	4455 17	5940 26	7425 33	8910 39	10395 44	11880 49	13365 53	14850 56	
48x48	16.00	15.50	Airflow, cfm NC	3100 -	4650 17	6200 26	7750 34	9300 39	10850 45	12400 49	13950 53	15500 56	

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

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30R RETURN / 3/8" SPACING / 0° DEFLECTION
PERFORMANCE BASED ON NOMINAL SIZES SHOWN IN BOLD

Nominal Duct Size (in.)	Nominal Duct Area sq. ft	Core Area sq. ft	Core Velocity Velocity Pressure Neg. Static Pressure	NC 20					NC 30			NC 40	
				200 0.002 0.006	300 0.006 0.013	400 0.010 0.022	500 0.016 0.035	600 0.022 0.050	800 0.040 0.090	1000 0.062 0.140	1200 0.090 0.202	1400 0.122 0.275	
6x6	0.25	0.19	Airflow, cfm NC	38 -	57 -	76 -	95 12	114 16	152 23	190 28	228 32	266 35	
8x6	0.33	0.26	Airflow, cfm NC	52 -	78 -	104 -	130 13	156 17	208 24	260 29	312 33	364 36	
10x6	0.42	0.34	Airflow, cfm NC	68 -	102 -	136 -	170 15	204 19	272 25	340 30	408 34	476 38	
8x8	0.44	0.37	Airflow, cfm NC	74 -	111 -	148 -	185 15	222 19	296 25	370 30	444 35	518 38	
12x6	0.50	0.41	Airflow, cfm NC	82 -	123 -	164 -	205 15	246 19	328 26	410 31	492 35	574 38	
14x6	0.58	0.48	Airflow, cfm NC	96 -	144 -	192 -	240 11	288 20	384 27	480 32	576 36	672 39	
16x6	0.67	0.57	Airflow, cfm	114	171	228	285	342	456	570	684	798	
12x8			NC	-	-	12	17	21	27	32	36	40	
10x10	0.69	0.59	Airflow, cfm NC	118 -	177 -	236 -	295 12	354 17	472 21	590 27	708 32	826 37	
18x6	0.75	0.63	Airflow, cfm NC	126 -	189 -	252 -	315 12	378 17	504 21	630 28	756 33	882 40	
20x6	0.83	0.72	Airflow, cfm	144	216	288	360	432	576	720	864	1008	
12x10			NC	-	-	13	18	22	28	33	37	41	
22x6	0.92	0.77	Airflow, cfm NC	154 -	231 -	308 -	385 13	462 18	616 22	770 29	924 34	1078 38	
24x6	1.00	0.88	Airflow, cfm	176	264	352	440	528	704	880	1056	1232	
12x12			NC	-	-	14	19	23	29	34	38	42	
30x6	1.25	1.11	Airflow, cfm	222	333	444	555	666	888	1110	1332	1554	
18x10			NC	-	-	15	20	24	30	35	39	43	
14x14	1.36	1.22	Airflow, cfm NC	244 -	366 -	488 -	610 15	732 20	976 24	1220 31	1464 36	1708 43	
36x6	1.50	1.35	Airflow, cfm	270	405	540	675	810	1080	1350	1620	1890	
18x12			NC	-	-	15	21	25	31	36	40	44	
22x10	1.53	1.37	Airflow, cfm NC	274 -	411 -	548 -	685 16	822 21	1096 25	1370 31	1644 36	1918 44	
30x8	1.67	1.49	Airflow, cfm	298	447	596	745	894	1192	1490	1788	2086	
24x10			NC	-	-	16	21	25	31	36	41	44	
42x6	1.75	1.59	Airflow, cfm	318	477	636	795	954	1272	1590	1908	2226	
18x14			NC	-	-	16	21	25	32	37	41	44	
16x16	1.78	1.62	Airflow, cfm NC	324 -	486 -	648 -	810 16	972 21	1296 25	1620 32	1944 37	2268 44	
24x12	2.00	1.82	Airflow, cfm NC	364 -	546 -	728 -	910 17	1092 22	1456 26	1820 32	2184 37	2548 45	
18x18	2.25	2.07	Airflow, cfm NC	414 -	621 11	828 17	1035 22	1242 26	1656 33	2070 38	2484 42	2898 45	
24x14	2.33	2.14	Airflow, cfm NC	428 -	642 11	856 18	1070 23	1284 27	1712 33	2140 38	2568 42	2996 46	
30x12	2.50	2.29	Airflow, cfm NC	458 -	687 11	916 18	1145 23	1374 27	1832 33	2290 38	2748 42	3206 46	
24x16	2.67	2.46	Airflow, cfm NC	492 -	738 12	984 18	1230 23	1476 27	1968 34	2460 39	2952 43	3444 46	
20x20	2.78	2.57	Airflow, cfm NC	514 -	771 12	1028 18	1285 23	1542 27	2056 34	2570 39	3084 43	3598 46	
36x12	3.00	2.75	Airflow, cfm NC	550 -	825 12	1100 19	1375 24	1650 28	2200 34	2750 39	3300 43	3850 47	
30x16	3.33	3.11	Airflow, cfm	622	933	1244	1555	1866	2488	3110	3732	4354	
24x20			NC	-	-	13	19	24	28	35	40	44	47
22x22	3.36	3.14	Airflow, cfm NC	628 -	942 13	1256 19	1570 24	1884 28	2512 35	3140 40	3768 44	4396 47	
42x12	3.50	3.22	Airflow, cfm	644	966	1288	1610	1932	2576	3220	3864	4508	
36x14			NC	-	-	13	19	24	28	35	40	44	47
24x22	3.67	3.43	Airflow, cfm NC	686 -	1029 13	1372 20	1715 25	2058 29	2744 35	3430 40	4116 44	4802 48	
30x18	3.75	3.50	Airflow, cfm NC	700 -	1050 13	1400 20	1750 25	2100 29	2800 35	3500 40	4200 44	4900 48	

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30R RETURN / 3/8" SPACING / 0° DEFLECTION
PERFORMANCE BASED ON NOMINAL SIZES SHOWN IN BOLD

Nominal Duct Size (in.)	Nominal Duct Area sq. ft	Core Area sq. ft	Core Velocity Core Velocity Pressure Neg. Static Pressure	NC 20				NC 30			NC 40		NC 50	
				200 0.002 0.006	300 0.006 0.013	400 0.010 0.022	500 0.016 0.035	600 0.022 0.050	800 0.040 0.090	1000 0.062 0.140	1200 0.090 0.202	1400 0.122 0.275		
48x12 24x24	4.00	3.75	Airflow, cfm NC	750 -	1125 13	1500 20	1875 25	2250 29	3000 35	3750 40	4500 45	5250 48		
36x18	4.50	4.22	Airflow, cfm NC	844 -	1266 14	1688 20	2110 25	2532 30	3376 36	4220 41	5064 45	5908 49		
36x20	5.00	4.71	Airflow, cfm NC	942 -	1413 14	1884 21	2355 26	2826 30	3768 36	4710 41	5652 46	6594 49		
42x18	5.25	4.94	Airflow, cfm NC	988 -	1482 15	1976 21	2470 26	2964 30	3952 37	4940 42	5928 46	6916 49		
28x28	5.44	5.16	Airflow, cfm NC	1032 -	1548 15	2064 21	2580 26	3096 30	4128 37	5160 42	6192 46	7224 49		
42x20	5.83	5.51	Airflow, cfm NC	1102 -	1653 15	2204 22	2755 27	3306 31	4408 37	5510 42	6612 46	7714 50		
48x18	6.00	5.66	Airflow, cfm NC	1132 -	1698 15	2264 22	2830 27	3396 31	4528 37	5660 42	6792 46	7924 50		
30x30	6.25	5.94	Airflow, cfm NC	1188 -	1782 15	2376 22	2970 27	3564 31	4752 37	5940 42	7128 47	8316 50		
42x24	7.00	6.66	Airflow, cfm NC	1332 -	1998 16	2664 22	3330 27	3996 32	5328 38	6660 43	7992 47	9324 51		
46x22	7.03	6.68	Airflow, cfm NC	1336 -	2004 16	2672 22	3340 27	4008 32	5344 38	6680 43	8016 47	9352 51		
32x32	7.11	6.78	Airflow, cfm NC	1356 -	2034 16	2712 23	3390 28	4068 32	5424 38	6780 43	8136 47	9492 51		
36x30	7.50	7.16	Airflow, cfm NC	1432 -	2148 16	2864 23	3580 28	4296 32	5728 38	7160 43	8592 47	10024 51		
48x24	8.00	7.63	Airflow, cfm NC	1526 -	2289 17	3052 23	3815 28	4578 32	6104 39	7630 44	9156 48	10682 51		
34x34	8.03	7.68	Airflow, cfm NC	1536 -	2304 17	3072 23	3840 28	4608 32	6144 39	7680 44	9216 48	10752 51		
36x34	8.50	8.14	Airflow, cfm NC	1628 -	2442 17	3256 23	4070 28	4884 32	6512 39	8140 44	9768 48	11396 51		
42x30	8.75	8.38	Airflow, cfm NC	1676 -	2514 17	3352 23	4190 28	5028 33	6704 39	8380 44	10056 48	11732 52		
36x36	9.00	8.63	Airflow, cfm NC	1726 -	2589 17	3452 24	4315 29	5178 33	6904 39	8630 44	10356 48	12082 52		
42x34	10.00	9.60	Airflow, cfm NC	1920 -	2880 18	3840 24	4800 29	5760 33	7680 40	9600 45	11520 49	13440 52		
48x30	10.03	9.64	Airflow, cfm NC	1928 -	2892 18	3856 24	4820 29	5784 33	7712 40	9640 45	11568 49	13496 52		
38x38	10.03	9.64	Airflow, cfm NC	1928 -	2892 18	3856 24	4820 29	5784 33	7712 40	9640 45	11568 49	13496 52		
42x36	10.50	10.10	Airflow, cfm NC	2020 -	3030 18	4040 24	5050 29	6060 33	8080 40	10100 45	12120 49	14140 52		
46x34	10.86	10.45	Airflow, cfm NC	2090 -	3135 18	4180 24	5225 29	6270 33	8360 40	10450 45	12540 49	14630 52		
42x38	11.08	10.67	Airflow, cfm NC	2134 -	3201 18	4268 24	5335 29	6402 34	8536 40	10670 45	12804 49	14938 53		
40x40	11.11	10.70	Airflow, cfm NC	2140 -	3210 18	4280 24	5350 29	6420 34	8560 40	10700 45	12840 49	14980 53		
48x36	12.00	11.57	Airflow, cfm NC	2314 -	3471 18	4628 25	5785 30	6942 34	9256 40	11570 45	13884 49	16198 53		
42x42	12.25	11.82	Airflow, cfm NC	2364 -	3546 18	4728 25	5910 30	7092 34	9456 40	11820 45	14184 49	16548 53		
44x44	13.44	12.99	Airflow, cfm NC	2598 -	3897 19	5196 25	6495 30	7794 34	10392 41	12990 46	15588 50	18186 53		
48x42	14.00	13.54	Airflow, cfm NC	2708 -	4062 19	5416 26	6770 31	8124 35	10832 41	13540 46	16248 50	18956 54		
46x46	14.69	14.22	Airflow, cfm NC	2844 -	4266 19	5688 26	7110 31	8532 35	11376 41	14220 46	17064 50	19908 54		
48x46	15.33	14.85	Airflow, cfm NC	2970 -	4455 19	5940 26	7425 31	8910 35	11880 41	14850 46	17820 51	20790 54		
48x48	16.00	15.50	Airflow, cfm NC	3100 11	4650 20	6200 26	7750 31	9300 35	12400 42	15500 47	18600 51	21700 54		

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