

1/2" SPACING

0° DEFLECTION

Nominal Size		Nom Duct ft2	Core Area ft2	Core Vel. fpm	200	300	400	500	600	700	800	900	1000
W Width	H Height				Ps	-0.01	-0.02	-0.03	-0.04	-0.06	-0.08	-0.11	-0.14
6	6	0.25	0.15	CFM	30	40	60	70	90	100	120	130	150
				NC	<20	<20	<20	<20	22	26	30	33	36
8	6	0.33	0.21	CFM	40	60	90	110	130	150	170	190	210
				NC	<20	<20	<20	<20	24	28	32	35	38
8	8	0.44	0.30	CFM	60	90	120	150	180	210	240	270	300
				NC	<20	<20	<20	20	25	30	33	36	39
12	6	0.50	0.34	CFM	70	100	140	170	200	240	270	310	340
				NC	<20	<20	<20	21	26	30	34	37	40
10	10	0.69	0.52	CFM	100	150	210	260	310	360	410	460	520
				NC	<20	<20	<20	23	28	32	36	39	42
14	8	0.78	0.58	CFM	120	170	230	290	350	410	460	520	580
				NC	<20	<20	<20	23	28	32	36	39	42
16	8	0.89	0.67	CFM	130	200	270	340	400	470	540	610	670
				NC	<20	<20	<20	24	29	33	37	40	43
12	12	1.00	0.78	CFM	160	240	310	390	470	550	630	710	780
				NC	<20	<20	<20	24	29	34	37	41	43
20	8	1.11	0.86	CFM	170	260	340	430	510	600	690	770	860
				NC	<20	<20	<20	25	30	34	38	41	44
18	10	1.25	1.00	CFM	200	300	400	500	600	700	800	900	1000
				NC	<20	<20	<20	25	30	35	38	42	44
14	14	1.36	1.11	CFM	220	330	440	550	660	770	890	1000	1110
				NC	<20	<20	20	26	31	35	39	42	45
24	10	1.67	1.36	CFM	270	410	540	680	810	950	1080	1220	1360
				NC	<20	<20	21	27	32	36	40	43	46
16	16	1.78	1.49	CFM	300	450	590	740	890	1040	1190	1340	1490
				NC	<20	<20	21	27	32	36	40	43	46
24	12	2.00	1.67	CFM	330	500	670	830	1000	1170	1340	1500	1670
				NC	<20	<20	22	28	33	37	41	44	47
22	16	2.44	2.09	CFM	420	630	840	1050	1260	1470	1680	1890	2090
				NC	<20	<20	23	29	34	38	42	45	48
20	20	2.78	2.41	CFM	480	720	960	1200	1450	1690	1930	2170	2410
				NC	<20	<20	23	29	34	39	42	45	48
22	22	3.36	2.95	CFM	590	890	1180	1480	1770	2070	2360	2660	2950
				NC	<20	<20	24	30	35	39	43	46	49
24	24	4.00	3.55	CFM	710	1070	1420	1780	2130	2490	2840	3200	3550
				NC	<20	<20	25	31	36	40	44	47	50
36	18	4.50	4.00	CFM	800	1200	1600	2000	2400	2800	3200	3600	4000
				NC	<20	<20	25	32	37	41	44	48	51
30	24	5.00	4.50	CFM	900	1350	1800	2250	2700	3150	3600	4050	4500
				NC	<20	<20	26	32	37	41	45	48	51
36	24	6.00	5.44	CFM	1090	1630	2180	2720	3260	3810	4350	4900	5440
				NC	<20	<20	27	33	38	42	46	49	52
30	30	6.25	5.69	CFM	1140	1710	2280	2850	3410	3980	4550	5120	5690
				NC	<20	<20	27	33	38	42	46	49	52
42	24	7.00	6.38	CFM	1280	1910	2550	3190	3830	4470	5110	5740	6380
				NC	<20	20	27	34	39	43	46	50	53
48	24	8.00	7.33	CFM	1470	2200	2930	3660	4400	5130	5860	6590	7330
				NC	<20	20	28	34	39	43	47	50	53
36	36	9.00	8.33	CFM	1670	2500	3330	4160	5000	5830	6660	7490	8330
				NC	<20	21	29	35	40	44	48	51	54
38	38	10.03	9.32	CFM	1860	2790	3730	4660	5590	6520	7450	8380	9320
				NC	<20	21	29	35	40	44	48	51	54
42	38	11.08	10.33	CFM	2070	3100	4130	5170	6200	7230	8270	9300	10330
				NC	<20	22	30	36	41	45	49	52	55
48	40	13.33	12.51	CFM	2500	3750	5000	6250	7500	8750	10000	11260	12510
				NC	<20	22	30	36	41	46	49	53	55
48	44	14.67	13.80	CFM	2760	4140	5520	6900	8280	9660	11040	12420	13800
				NC	<20	23	31	37	42	46	50	53	56
48	48	16.00	15.10	CFM	3020	4530	6040	7550	9060	10570	12080	13590	15100
				NC	<20	23	31	37	42	47	50	53	56

Notes:

- Nominal size represents duct size.

Test Standard

- ANSI / ASHRAE standard 70

Sound Levels

- NC is noise criteria curve that will not be exceeded at the operating point. This is determined by assuming a 10dB (ref: 10⁻¹² watts) room attenuation that is subtracted from the power levels in each of the 2nd thru 7th octave bands

Pressure

- P_S represents static pressure requirement. Total pressure can be calculated as P_T = P_S + P_V
- P_V is the air velocity pressure in the duct and is calculated as P_V = (Velocity/4005)²
- All pressures are stated and calculated in inches of water

Opposed Blade Volume Control Dampers (OBD) - wide open

- Increase Static Pressure P_S x 1.15 when used with an OBD
- Increase NC +3 when used with an OBD

1/2" SPACING

40° DEFLECTION

Nominal Size		Nom Duct ft2	Core Area ft2	Core Vel, fpm	200	300	400	450	500	550	600	650	700
W Width	H Height				Ps	-0.01	-0.03	-0.06	-0.07	-0.09	-0.10	-0.12	-0.15
6	6	0.25	0.15	CFM	30	40	60	70	70	80	90	100	100
				NC	<20	<20	20	23	26	28	30	32	34
8	6	0.33	0.21	CFM	40	60	90	100	110	120	130	140	150
				NC	<20	<20	21	24	27	30	32	34	36
8	8	0.44	0.30	CFM	60	90	120	140	150	170	180	200	210
				NC	<20	<20	23	26	29	31	33	36	37
12	6	0.50	0.34	CFM	70	100	140	150	170	190	200	220	240
				NC	<20	<20	23	26	29	32	34	36	38
10	10	0.69	0.52	CFM	100	150	210	230	260	280	310	340	360
				NC	<20	<20	25	28	31	33	36	38	40
14	8	0.78	0.58	CFM	120	170	230	260	290	320	350	380	410
				NC	<20	<20	26	29	32	34	36	38	40
16	8	0.89	0.67	CFM	130	200	270	300	340	370	400	440	470
				NC	<20	<20	26	29	32	35	37	39	41
12	12	1.00	0.78	CFM	160	240	310	350	390	430	470	510	550
				NC	<20	20	27	30	33	35	38	40	42
20	8	1.11	0.86	CFM	170	260	340	390	430	470	510	560	600
				NC	<20	20	27	30	33	36	38	40	42
18	10	1.25	1.00	CFM	200	300	400	450	500	550	600	650	700
				NC	<20	21	28	31	34	36	39	41	43
14	14	1.36	1.11	CFM	220	330	440	500	550	610	660	720	770
				NC	<20	21	29	32	34	37	39	41	43
24	10	1.67	1.36	CFM	270	410	540	610	680	750	810	880	950
				NC	<20	22	29	32	35	38	40	42	44
16	16	1.78	1.49	CFM	300	450	590	670	740	820	890	970	1040
				NC	<20	22	30	33	36	38	40	42	44
24	12	2.00	1.67	CFM	330	500	670	750	830	920	1000	1090	1170
				NC	<20	23	30	33	36	39	41	43	45
22	16	2.44	2.09	CFM	420	630	840	940	1050	1150	1260	1360	1470
				NC	<20	24	31	34	37	40	42	44	46
20	20	2.78	2.41	CFM	480	720	960	1080	1200	1320	1450	1570	1690
				NC	<20	24	32	35	38	40	42	45	46
22	22	3.36	2.95	CFM	590	890	1180	1330	1480	1620	1770	1920	2070
				NC	<20	25	33	36	39	41	43	45	47
24	24	4.00	3.55	CFM	710	1070	1420	1600	1780	1960	2130	2310	2490
				NC	<20	26	34	37	39	42	44	46	48
36	18	4.50	4.00	CFM	800	1200	1600	1800	2000	2200	2400	2600	2800
				NC	<20	27	34	37	40	42	45	47	49
30	24	5.00	4.50	CFM	900	1350	1800	2020	2250	2470	2700	2920	3150
				NC	<20	27	35	38	40	43	45	47	49
36	24	6.00	5.44	CFM	1090	1630	2180	2450	2720	2990	3260	3540	3810
				NC	<20	28	35	39	41	44	46	48	50
30	30	6.25	5.69	CFM	1140	1710	2280	2560	2850	3130	3410	3700	3980
				NC	<20	28	36	39	41	44	46	48	50
42	24	7.00	6.38	CFM	1280	1910	2550	2870	3190	3510	3830	4150	4470
				NC	<20	29	36	39	42	44	47	49	51
48	24	8.00	7.33	CFM	1470	2200	2930	3300	3660	4030	4400	4760	5130
				NC	<20	29	37	40	43	45	47	49	51
36	36	9.00	8.33	CFM	1670	2500	3330	3750	4160	4580	5000	5410	5830
				NC	<20	30	37	40	43	46	48	50	52
38	38	10.03	9.32	CFM	1860	2790	3730	4190	4660	5120	5590	6050	6520
				NC	20	30	38	41	44	46	48	50	52
42	38	11.08	10.33	CFM	2070	3100	4130	4650	5170	5680	6200	6720	7230
				NC	20	31	38	41	44	46	49	51	53
48	40	13.33	12.51	CFM	2500	3750	5000	5630	6250	6880	7500	8130	8750
				NC	21	32	39	42	45	47	50	52	54
48	44	14.67	13.80	CFM	2760	4140	5520	6210	6900	7590	8280	8970	9660
				NC	21	32	39	43	45	48	50	52	54
48	48	16.00	15.10	CFM	3020	4530	6040	6790	7550	8300	9060	9810	10570
				NC	22	32	40	43	46	48	50	52	54

Notes:

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Test Standard

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- NC is noise criteria curve that will not be exceeded at the operating point. This is determined by assuming a 10dB (ref: 10⁻¹² watts) room attenuation that is subtracted from the power levels in each of the 2nd thru 7th octave bands

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Medium Security

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