

Design #23



Core Area Sq. Feet	Nominal Duct Size in Inches	Core Velocity	100	200	300	400	500	600	700	800	900	1000
		Velocity Pressure	0.001	0.002	0.006	0.01	0.016	0.022	0.031	0.04	0.051	0.062
		TP: Total Pressure	0.003	0.014	0.031	0.056	0.09	0.131	0.175	0.225	0.29	0.355
0.2	10x4 6x6	CFM	20	41	61	82	102	122	143	163	184	204
		NC				16	22	26	30	33	36	39
		4-Way, 45° Fixed			4-6-9	5-8-13	6-9-15	8-11-18	9-13-21	10-14-20	11-16-23	12-17-25
		2-Way, 45° Fixed			5-7-11	6-9-15	8-11-18	9-14-22	10-15-21	12-17-25	13-20-32	15-22-35
		1-Way, Straight			6-9-14	8-11-18	9-14-22	11-15-22	12-18-26	14-21-34	16-24-38	16-26-42
0.26	12x4 8x6	CFM	26	51	82	107	133	158	184	214	240	265
		NC			10	17	23	27	31	34	37	40
		4-Way, 45° Fixed		3-4-7	4-5-6	6-9-14	7-10-16	8-12-20	10-13-19	11-15-22	12-17-25	13-20-32
		2-Way, 45° Fixed		3-5-8	5-6-8	7-9-12	8-12-20	10-14-20	11-16-23	13-19-31	14-21-34	16-24-38
		1-Way, Straight		4-5-6	6-8-11	8-11-15	10-14-20	12-17-24	13-20-32	15-23-37	17-26-41	19-28-45
0.3	14x4	CFM	31	61	92	122	153	184	214	245	275	306
		NC			10	18	23	27	31	35	38	41
		4-Way, 45° Fixed		3-4-7	4-5-6	6-8-10	7-10-13	9-12-17	10-14-20	11-16-23	12-18-26	14-21-33
		2-Way, 45° Fixed		3-5-8	5-7-9	7-10-13	9-12-17	10-14-20	12-17-24	13-20-32	16-24-38/	16-24-39
		1-Way, Straight		4-5-6	6-8-11	8-11-16	10-15-21	12-17-25	14-21-34	16-24-38	18-27-43	20-29-47
0.35	16x4 12x5 10x6 8x8	CFM	36	71	107	143	179	214	250	286	321	357
		NC			11	18	24	28	32	36	38	41
		4-Way, 45° Fixed		3-4-7	5-7-11	6-9-15	8-11-18	9-13-21	10-15-21	12-17-24	13-19-31	14-21-34
		2-Way, 45° Fixed		4-6-9	5-8-13	7-10-13	9-13-21	10-15-21	12-17-25	14-21-33	15-23-37	17-26-41
		1-Way, Straight		4-5-6	7-9-12	9-12-17	10-15-21	12-18-26	15-22-35	17-25-40	18-27-44	20-31-49
0.4	18x4 12x6	CFM	41	82	122	163	204	245	286	326	367	408
		NC			12	19	25	29	33	36	39	42
		4-Way, 45° Fixed		3-5-8	5-6-7	6-8-11	8-11-15	9-13-18	11-15-22	12-17-25	13-20-32	15-22-35
		2-Way, 45° Fixed		4-6-9	6-8-10	8-10-14	9-13-18	11-15-22	12-18-26	14-21-34	16-24-38	18-26-42
		1-Way, Straight		5-6-7	7-9-12	9-13-18	11-15-22	13-19-31	15-22-36	17-26-41	19-29-46	21-32-51
0.45	20x4 14x6 10x8	CFM	46	92	138	184	230	275	321	367	413	459
		NC			12	19	25	29	33	37	40	43
		4-Way, 45° Fixed		3-5-8	5-6-8	6-9-15	8-12-19	10-13-19	11-15-22	12-18-26	14-21-33	15-23-37
		2-Way, 45° Fixed		4-6-9	6-8-10	8-12-19	10-13-19	11-16-23	13-19-31	15-22-35	16-24-39	18-27-44
		1-Way, Straight		5-7-11	7-11-17	9-14-22	11-16-23	13-20-32	15-23-37	18-26-42	20-29-47	22-33-53
0.55	24x4 16x6 12x8	CFM	56	112	168	224	281	337	393	449	505	561
		NC			13	20	25	30	34	38	40	43
		4-Way, 45° Fixed	2-3-4	3-5-8	5-7-12	7-10-16	8-12-20	10-14-20	12-17-24	13-19-31	15-22-35	16-24-39
		2-Way, 45° Fixed	2-3-5	6-6-10	6-9-15	8-12-20	10-14-20	12-17-25	14-21-33	15-23-37	17-26-41	19-29-46
		1-Way, Straight	2-4-6	5-7-12	8-11-18	10-13-19	12-17-25	14-21-34	16-24-39	18-27-44	21-31-50	23-35-56
0.62	18x6 10x10	CFM	61	128	189	255	316	377	444	505	571	632
		NC			13	21	26	31	35	38	41	44
		4-Way, 45° Fixed	2-3-4	4-6-9	5-8-13	7-11-17	9-13-21	10-15-21	12-17-24	13-20-32	15-22-36	17-25-40
		2-Way, 45° Fixed	2-3-5	4-6-10	6-9-15	8-12-20	10-16-25	12-17-25	14-21-34	16-24-38	18-27-43	20-29-47
		1-Way, Straight	2-3-6	5-7-12	8-11-18	10-14-20	12-19-30	15-22-35	17-26-41	19-29-46	21-32-51	24-36-57
0.7	30x4 20x6 14x8 12x10	CFM	71	143	214	286	357	428	500	571	643	714
		NC	0	0	14	21	26	31	35	39	41	44
		4-Way, 45° Fixed	2-3-5	4-6-9	5-8-13	7-11-17	9-13-21	10-15-21	12-17-25	14-21-33	15-23-37	17-26-41
		2-Way, 45° Fixed	2-4-6	5-7-11	7-10-16	9-13-20	10-15-21	12-18-26	15-22-35	17-25-40	18-27-44	20-31-49
		1-Way, Straight	3-4-7	5-8-13	8-12-19	10-15-21	12-19-30	15-22-36	18-26-42	20-29-47	22-33-53	25-37-59
0.81	36x4 24x6 16x8 14x10	CFM	82	163	250	332	413	495	576	663	745	826
		NC			15	22	27	32	36	39	42	45
		4-Way, 45° Fixed	2-3-5	4-6-9	6-9-14	8-11-18	9-14-22	11-15-22	12-18-26	14-21-34	16-24-38	18-27-43
		2-Way, 45° Fixed	2-4-6	5-7-11	7-10-16	9-14-22	11-15-22	13-19-31	15-22-36	17-26-41	19-29-46	21-32-51
		1-Way, Straight	3-4-7	5-8-13	8-12-20	11-15-22	13-20-32	16-24-38	18-27-44	20-31-49	23-34-55	26-39-62
0.87	18x8 12x12	CFM	87	179	265	357	444	530	622	709	801	887
		NC			15	22	27	32	36	39	42	45
		4-Way, 45° Fixed	2-3-5	4-6-9	6-9-14	8-12-19	10-13-19	11-16-23	13-19-31	15-22-35	16-24-39	18-27-43
		2-Way, 45° Fixed	2-4-6	5-7-11	7-11-17	9-14-22	11-16-23	13-20-32	15-23-37	18-26-42	20-39-47	22-32-52
		1-Way, Straight	3-4-7	6-9-14	8-12-20	11-15-22	13-20-32	16-24-39	19-28-45	21-31-50	23-35-56	26-39-63

Core Area Sq. Feet	Nominal Duct Size in Inches	Core Velocity	100	200	300	400	500	600	700	800	900	1000
		Velocity Pressure	0.001	0.002	0.006	0.01	0.016	0.022	0.031	0.04	0.051	0.062
		TP: Total Pressure	0.003	0.014	0.031	0.056	0.09	0.131	0.175	0.225	0.29	0.355
1.02	30x6 20x8 16x10 14x12	CFM	102	209	311	418	520	622	729	831	938	1040
		NC			16	23	28	33	37	40	43	46
		4-Way, 45° Fixed	2-3-5	4-6-10	6-9-15	8-12-19	10-14-20	12-17-24	13-20-32	15-22-36	17-26-41	19-28-45
		2-Way, 45° Fixed	2-4-6	5-7-12	7-11-17	10-13-19	12-17-24	14-21-33	16-24-29	18-27-43	20-31-49	23-34-55
		1-Way, Straight	3-4-7	6-9-14	9-13-21	11-17-27	14-21-34	17-25-40	19-29-46	22-32-52	25-37-59	27-41-65
1.15	24x8 18x10 16x12	CFM	117	235	352	469	587	704	821	938	1061	1173
		NC			16	24	29	33	37	41	44	47
		4-Way, 45° Fixed	2-3-5	4-6-10	6-9-15	8-12-20	10-15-21	12-17-25	14-21-33	16-24-38	18-26-42	19-29-46
		2-Way, 45° Fixed	2-4-6	5-7-12	8-11-18	10-13-19	12-17-25	14-21-34	17-25-40	19-28-45	21-31-50	23-35-56
		1-Way, Straight	3-5-8	6-9-15	9-14-22	12-17-24	15-22-35	17-26-41	20-29-47	22-34-54	25-37-60	28-42-68
1.25	36x6 20x10 14x14	CFM	128	255	383	510	638	765	893	1020	1142	1275
		NC			16	24	29	34	38	41	44	47
		4-Way, 45° Fixed	2-3-5	4-5-6	6-8-11	8-12-20	10-15-21	12-17-25	14-21-34	16-24-38	18-27-43	20-29-47
		2-Way, 45° Fixed	2-4-6	5-6-8	8-10-14	10-14-20	12-18-26	15-22-35	17-26-41	19-29-46	21-32-51	24-26-57
		1-Way, Straight	3-5-8	6-8-11	9-13-18	12-17-25	15-22-35	18-26-42	20-30-48	23-34-55	26-39-62	29-43-69
1.35	16x14 18x12	CFM	138	275	413	551	689	826	964	1102	1244	1377
		NC			17	24	29	34	38	41	44	47
		4-Way, 45° Fixed	2-4-6	4-5-6	7-10-16	9-13-21	10-15-21	12-18-26	15-22-35	16-24-39	18-27-43	20-30-48
		2-Way, 45° Fixed	3-4-7	5-7-9	8-12-19	10-15-21	12-18-26	15-22-36	18-26-42	20-29-47	22-33-53	25-37-59
		1-Way, Straight	3-5-8	6-8-11	10-13-19	12-17-25	15-22-36	18-27-43	21-31-50	23-35-56	26-39-63	29-44-70
1.53	30x8 24x10 20x12 18x14 16x16	CFM	158	311	469	622	780	938	1091	1244	1408	1561
		NC			17	25	30	35	39	42	45	48
		4-Way, 45° Fixed	2-4-6	5-6-7	7-10-16	9-13-21	11-15-22	13-19-31	15-22-36	17-25-40	19-28-45	21-31-50
		2-Way, 45° Fixed	3-4-7	5-7-9	8-12-19	10-15-21	13-20-32	15-23-37	18-27-43	20-30-48	23-34-55	25-37-60
		1-Way, Straight	3-5-8	7-9-12	10-13-19	12-18-26	15-23-37	18-27-44	21-32-51	24-26-58	27-41-65	30-46-73
1.82	36x8 30x10 24x12 20x14 18x16	CFM	186	372	556	745	928	1112	1295	1489	1673	1856
		NC			18	25	31	35	39	43	46	49
		4-Way, 45° Fixed	2-4-6	5-6-7	7-11-17	9-14-22	11-16-23	13-20-32	15-23-37	18-26-42	20-29-47	22-33-53
		2-Way, 45° Fixed	3-4-7	6-8-10	8-12-20	11-16-23	14-21-33	16-24-29	19-28-45	21-31-50	24-36-57	26-39-63
		1-Way, Straight	3-5-8	7-9-12	10-14-20	13-20-32	16-24-39	19-29-46	22-34-54	25-37-60	29-42-68	32-48-76
2.1	24x14 30x16 18x18	CFM	214	428	643	857	1071	1285	1499	1714	1928	2142
		NC	0	0	19	25	31	36	40	43	46	49
		4-Way, 45° Fixed	2-4-6	5-6-8	8-11-18	10-13-19	12-17-24	14-21-34	16-24-39	18-27-44	20-31-49	23-34-55
		2-Way, 45° Fixed	3-4-7	6-8-10	9-13-21	12-17-24	14-21-34	17-25-40	19-29-46	22-32-52	25-37-59	28-41-66
		1-Way, Straight	4-6-9	7-10-13	10-15-21	14-21-33	17-25-40	20-30-48	23-34-55	26-39-62	29-44-70	33-50-80
2.35	36x10 30x12 24x16 20x18	CFM	240	479	719	959	1204	1438	1673	1918	2162	2397
		NC			19	26	32	36	40	44	47	50
		4-Way, 45° Fixed	2-4-6	5-6-8	8-11-18	10-14-20	12-17-25	15-22-35	17-25-40	19-28-45	21-31-50	24-36-57
		2-Way, 45° Fixed	3-5-8	6-8-11	9-14-22	12-17-24	15-22-35	18-26-42	20-30-48	22-34-54	25-38-61	28-42-68
		1-Way, Straight	4-6-9	7-10-13	11-15-22	14-21-33	18-26-42	20-31-49	24-36-57	27-40-64	30-45-72	34-51-82
2.68	36x12 30x14 24x18 20x20	CFM	275	546	821	1091	1367	1642	1918	2183	2458	2734
		NC			20	26	32	37	41	44	47	50
		4-Way, 45° Fixed	3-4-7	5-7-9	8-12-19	10-15-21	12-18-26	15-22-36	18-26-42	20-29-47	22-32-52	25-37-59
		2-Way, 45° Fixed	3-5-8	6-8-11	9-14-22	12-17-25	15-22-36	20-30-48	20-31-49	23-35-56	26-39-62	29-44-70
		1-Way, Straight	4-6-9	8-10-14	11-16-23	15-22-35	18-27-43	21-32-51	25-37-59	28-41-66	31-47-75	35-53-85
3.15	36x16 30x18 24x24	CFM	321	643	964	1285	1612	1928	2244	2570	2897	3213
		NC		10	20	27	33	38	42	45	48	51
		4-Way, 45° Fixed	3-4-7	5-7-9	8-12-19	11-15-22	13-19-31	15-23-37	18-27-43	20-31-49	23-34-55	26-39-62
		2-Way, 45° Fixed	3-5-8	7-9-12	10-14-20	12-18-26	16-24-38	19-28-45	21-32-51	24-36-58	27-41-65	30-46-73
		1-Way, Straight	4-5-6	8-11-15	12-17-24	15-22-36	19-28-45	22-3-53	26-39-62	29-43-69	33-49-79	37-56-89
3.65	36x18 30x20	CFM	372	745	1122	1489	1856	2234	2611	2978	3346	3723
		NC		11	21	28	34	38	42	46	49	52
		4-Way, 45° Fixed	3-4-7	5-7-9	8-12-19	11-15-22	13-19-31	15-23-37	18-27-43	21-31-50	24-36-57	27-40-64
		2-Way, 45° Fixed	3-5-8	7-9-12	10-14-20	12-18-26	16-24-38	19-28-45	21-32-51	25-37-60	28-42-68	32-48-76
		1-Way, Straight	4-5-6	8-11-15	12-17-24	15-22-36	19-28-45	22-33-53	26-39-62	30-45-72	34-51-83	38-57-92

CFM: Cubic Feet per Minute

*All pressures are in inches of water.

Page #2 of 2

FPM: Feet per Minute

* Blank areas denote NC values less than 10 and CFM values less than 50.

TP: Total Pressure, inches w.g.

*Throw values are measured in feet for terminal velocities of 150/100/50 FPM.

T: Throw in feet

*Throw values are based on fixed louvers set at 45 degrees.

NC: Noise Criteria

* Throw may be increased or decreased by as much as 20% by changing angle of louver.