

Design #32



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	40	59	79	99	119	139	158	178	198
		NC				16	22	27	31	34	37	40
		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	25	50	79	104	129	153	178	208	233	257
		NC			10	17	23	28	32	35	38	41
		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	30	59	89	119	149	178	208	238	267	297
		NC			10	18	23	28	32	36	39	42
		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	35	69	104	139	173	208	243	277	312	347
		NC			11	18	24	29	33	37	39	42
		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	40	79	119	158	198	238	277	317	356	396
		NC			12	19	25	30	34	37	40	43
		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	45	89	134	178	223	267	312	356	401	446
		NC			12	19	26	30	34	38	41	44
		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	54	109	163	218	272	327	381	436	490	545
		NC			13	20	26	31	35	39	41	44
		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	59	124	183	248	307	366	431	490	554	614
		NC			13	21	27	32	36	39	42	45
		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	69	139	208	277	347	416	485	554	624	693
		NC	0	0	14	21	27	32	36	40	42	45
		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	79	158	243	322	401	480	559	644	723	802
		NC			15	22	28	33	37	40	43	46
		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	84	173	257	347	431	515	604	688	777	861
		NC			15	22	28	33	37	40	43	46
		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	99	203	302	406	505	604	708	807	911	1010
		NC			16	23	29	34	38	41	44	47
		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	114	228	342	455	569	683	797	911	1030	1139
		NC			16	24	30	34	38	42	45	48
		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	124	248	371	495	619	743	866	990	1109	1238
		NC			16	24	30	35	39	42	45	48
		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	134	267	401	535	668	802	936	1069	1208	1337
		NC			17	24	30	35	39	42	45	48
		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	153	302	455	604	757	911	1059	1208	1366	1515
		NC			17	25	31	36	40	43	46	49
		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	180	361	540	723	901	1079	1257	1445	1624	1802
		NC			18	26	32	36	40	44	47	51
		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	208	416	624	832	1040	1247	1455	1663	1871	2079
		NC	0	0	19	26	32	37	41	44	47	51
		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	233	465	698	931	1168	1396	1624	1861	2099	2327
		NC			19	27	33	37	41	45	48	52
		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	267	530	797	1059	1327	1594	1861	2119	2386	2653
		NC			20	27	33	38	42	45	48	52
		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	312	624	936	1247	1564	1871	2178	2495	2812	3119
		NC		10	20	28	34	39	43	46	49	53
		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	361	723	1089	1445	1802	2168	2534	2891	3247	3614
		NC		11	21	29	35	39	43	47	51	54
		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.

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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.